Radius Health, Inc.
Form S-1/A
October 06, 2011

Use these links to rapidly review the document
TABLE OF CONTENTS1
FINANCIAL STATEMENTS

Table of Contents

As filed with the Securities and Exchange Commission on October 6, 2011

Registration No. 333-175091

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 2 to

FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Radius Health, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**2834**	**80-0145732**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

201 Broadway, 6th Floor
Cambridge, MA 02139
(617) 551-4700

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

C. Richard Lyttle, Ph.D.
Chief Executive Officer
Radius Health, Inc.
201 Broadway, 6th Floor
Cambridge, MA 02139
(617) 551-4700

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

Copies to:

Julio E. Vega, Esq.
Matthew J. Cushing, Esq.
Bingham McCutchen LLP
One Federal Street
Boston, MA 02110
(617) 951-8000

Approximate date of commencement of proposed sale to the public:
Promptly after the effective date of this Registration Statement, subject to applicable contractual lock-up agreements.

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

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. o

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

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. o

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 definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Aggregate Offering Price per Share	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, $0.0001 par value per share(3)	195,552	$8.14(4)	$1,592,185	$185
Common Stock, $0.0001 par value per share(5)	5,112,120	$8.14(4)	$41,622,882	$4,833
Common Stock, $0.0001 par value per share(6)	88	$15.00(7)	$1,320	$1
Common Stock, $0.0001 par value per share(8)	12,840	$8.14(9)	$104,544	$13
Total	5,320,600		$43,320,931(2)	$5,032(10)

(1) This Registration Statement covers the resale by our selling stockholders of up to 5,320,600 shares of our common stock.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

(3) Consists of 195,552 shares of our currently issued common stock to be offered by the selling stockholders.

(4) Our common stock is not traded on any national exchange and in accordance with Rule 457; the offering price was determined based upon a per share amount of $8.142, the negotiated conversion price of our convertible preferred stock and the minimum price at which selling stockholders may sell their shares of common stock until the common stock is registered on a national securities exchange.

(5)

Consists of 5,112,120 unissued shares of our common stock to be offered for resale by certain selling stockholders upon the conversion of 511,212 currently outstanding shares of our convertible preferred stock.

(6)

Consists of 266 unissued shares of our common stock to be offered for resale by certain selling stockholders upon the exercise of outstanding common stock purchase warrants.

(7)

Fee is based on the exercise price of $15.00 per share applicable to shares issuable upon the exercise of common stock purchase warrants in accordance with Rule 457(g) of the Securities Act of 1933, as amended.

(8)

Consists of 12,840 unissued shares of our common stock to be offered for resale by certain selling stockholders upon the conversion of 1,284 shares of our convertible preferred stock to be issued upon exercise of outstanding preferred stock purchase warrants.

(9)

Fee is based on the price of $8.142 which was determined in accordance with Rule 457(g) of the Securities Act of 1933, as amended, by dividing the exercise price of $81.42 per share of convertible preferred stock by ten, as each share of convertible preferred stock is convertible into ten shares of common stock.

(10)

We have previously paid $15,208.

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 WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 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.

Table of Contents

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

OFFERING PROSPECTUS
SUBJECT TO COMPLETION, DATED OCTOBER 6, 2011

Radius Health, Inc.

5,320,600 Shares
Common Stock

The selling stockholders identified on pages 99-101 of this prospectus are offering on a resale basis a total of up to 5,320,600 shares of our Common Stock, $0.0001 par value per share ("Common Stock"), consisting of (i) 195,552 currently issued shares of our Common Stock to be offered for resale by certain selling stockholders, (ii) 5,112,120 unissued shares of our Common Stock to be offered for resale by certain selling stockholders upon the conversion of 511,212 outstanding shares of our convertible preferred stock, $0.0001 par value per share ("Preferred Stock"), (iii) 88 unissued shares of our Common Stock to be offered for resale by certain selling stockholders upon the exercise of outstanding common stock purchase warrants, and (iv) 12,840 unissued shares of our Common Stock to be offered for resale by certain selling stockholders upon the conversion of 1,284 shares of our Preferred Stock to be issued upon exercise of outstanding preferred stock purchase warrants.

There is not currently, and there has never been, any market for any of our securities. Our securities are not eligible for trading on any national securities exchange, the Nasdaq or other over-the-counter markets, including the OTC Bulletin Board®. The selling stockholders identified herein will be required to sell the common stock (including shares of common stock issued upon conversion of preferred stock and exercise of warrants) registered hereunder at a fixed price of $8.142 per share until such time as such securities are traded on a national securities exchange, the Nasdaq or the OTC Bulletin Board®. At and after such time that such securities are eligible for trading in such a manner, the selling stockholders may sell such securities at the prevailing market price or at a privately negotiated price.

The securities offered by this prospectus involve a high degree of risk.
See "Risk Factors" beginning on page 5.

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

The date of this Prospectus is , 2011.

Table of Contents

TABLE OF CONTENTS

	Page
Prospectus Summary	1
Risk Factors	5
Cautionary Statement Regarding Forward-Looking Statements	18
Description of the Business of Radius Health, Inc.	19
Management's Discussion and Analysis of Financial Condition and Results of Operations	55
Management	72
Summary Compensation Table	81
Security Ownership Of Certain Beneficial Owners and Management	89
Market for Common Equity and Related Stockholder Matters	98
Use of Proceeds	99
Determination of Offering Price	99
Selling Stockholders	99
Plan of Distribution	104
Description of Capital Stock	106
Disclosure Of Commission Position On Indemnification For Securities Act Liabilities	112
About This Prospectus	112
Where You Can Find More Information	112
Validity of Common Stock	112
Experts	112
Financial Statements	F-1

Table of Contents

PROSPECTUS SUMMARY

The following summary highlights selected information contained elsewhere in this Prospectus. This summary does not contain all the information that you should consider before investing in our securities. You should carefully read the entire Prospectus, paying particular attention to the risks referred to under the heading "Risk Factors."

About This Offering

This Prospectus relates to the resale of up to 5,320,600 shares of our Common Stock to be offered by the selling stockholders consisting of (i) 195,552 currently issued shares of our Common Stock to be offered for resale by certain selling stockholders, (ii) 5,112,120 unissued shares of our Common Stock to be offered for resale by certain selling stockholders upon the conversion of 511,212 outstanding shares of our Preferred Stock, (iii) 88 unissued shares of our Common Stock to be offered for resale by certain selling stockholders upon the exercise of outstanding common stock purchase warrants, and (iv) 12,840 unissued shares of our Common Stock to be offered for resale by certain selling stockholders upon the conversion of 1,284 shares of our Preferred Stock to be issued upon exercise of outstanding preferred stock purchase warrants.

Summary of the Shares offered by the Selling Stockholders.

The following is a summary of the shares being offered by the selling stockholders:

Securities Offered	5,320,600 shares of our Common Stock to be offered by the selling stockholders consisting of: (i) 195,552 currently issued shares of our Common Stock to be offered for resale by certain selling stockholders, (ii) 5,112,120 unissued shares of our Common Stock to be offered for resale by certain selling stockholders upon the conversion of 511,212 outstanding shares of our Preferred Stock, (iii) 88 unissued shares of our Common Stock to be offered for resale by certain selling stockholders upon the exercise of outstanding common stock purchase warrants, (iv) 12,840 unissued shares of our Common Stock to be offered for resale by certain selling stockholders upon the conversion of 1,284 shares of our Preferred Stock to be issued upon exercise of outstanding preferred stock purchase warrants.
Capital Stock	As of October 6, 2011 there were 592,581 shares of our Common Stock issued and outstanding. Assuming conversion of all outstanding Preferred Stock on the date hereof there would be 16,083,881 shares of Common Stock outstanding.
Use of Proceeds	We will not receive any proceeds from the sale of the Common Stock offered by the selling stockholder. However, we will generate proceeds in the event of a cash exercise of the warrants by the selling stockholder. We intend to use those proceeds, if any, for general corporate purposes.
Risk Factors	The securities offered hereby involve a high degree of risk. See "Risk Factors" beginning on page 5.
Offering Price	All or part of the shares of Common Stock offered hereby may be sold from time to time in amounts and on terms to be determined by the selling stockholder at the time of sale.

Table of Contents

Market for Our Shares	There is not now and never has been any market for our securities and an active market may never develop.

The Company

We were incorporated in the state of Delaware on February 4, 2008 under the name MPM Acquisition Corp. In May 2011, we entered into a reverse merger transaction (the "Merger") with Radius Health, Inc., a Delaware corporation formed on October 3, 2003 (the "Former Operating Company") pursuant to which the Former Operating Company became a wholly-owned subsidiary of ours. Immediately following the merger transaction, the Former Operating Company was merged with and into us, we assumed the business of the Former Operating Company and changed our name to "Radius Health, Inc."

Recent Developments

At the effective time of the Merger (the "Effective Time"), all of the shares of the Former Operating Company's common stock, par value $.01 per share (the "Former Operating Company Common Stock"), and shares of the Former Operating Company's preferred stock, par value $.01 per share (the "Former Operating Company Preferred Stock"), that were outstanding immediately prior to the Merger were cancelled and each outstanding share of the Former Operating Company Common Stock outstanding immediately prior to the Effective Time was automatically converted into the right to receive one share of our Common Stock, par value $.0001, and each outstanding share of the Former Operating Company Preferred Stock outstanding immediately prior to the Effective Time was automatically converted into the right to receive one-tenth of one share of our corresponding series of Preferred Stock, par value $.0001, as consideration for the Merger. In the Merger, we assumed all options and warrants of the Former Operating Company outstanding immediately prior to the Effective Time. Prior to the Merger, pursuant to the terms of a Redemption Agreement dated April 25, 2011, we completed the repurchase of all of our capital stock issued and outstanding immediately prior to the Merger from our former sole stockholder, MPM Asset Management LLC. Upon completion of the Merger and the redemption, the former stockholders of the Former Operating Company held 100% of the outstanding shares of our capital stock. Pursuant to the Merger, we assumed all of the the Former Operating Company's obligations under its existing contracts, including those filed herewith as material contracts. In particular, we have assumed the rights and obligations of the Former Operating Company under that certain Series A-1 Convertible Preferred Stock Purchase Agreement (the "Original Purchase Agreement") with certain investors listed therein (the "Investors") pursuant to which, among other things, the Former Operating Company agreed to issue and sell to the Investors up to an aggregate of 7,895,535 shares of Series A-1 Convertible Preferred Stock, par value $.01 per share, to be completed in three closings (the initial closing, the "Stage I Closing", the second closing, the "Stage II Closing" and the final closing, the "Stage III Closing") (collectively, the "Series A-1 Financing"). The Original Purchase Agreement was subsequently amended by Amendment No. 1 thereto to eliminate all closing conditions previously provided for in the Original Purchase Agreement (as so amended, the "Purchase Agreement"). Upon notice from us, the Investors are obligated to purchase, and we are obligated to issue, 263,178 shares of our Series A-1 Convertible Preferred Stock ("Series A-1 Preferred Stock") at the Stage II Closing and 263,180 shares of our Series A-1 Preferred Stock at the Stage III Closing, each at a purchase price per share of $81.42. There are no conditions to funding if we notify the Investors of any such closing.

As a final step in the reverse merger process, we completed a short-form merger with the Former Operating Company and changed our name to "Radius Health, Inc." as the surviving entity of the short-form merger.

Table of Contents

The foregoing description of the Merger Agreement, the Redemption Agreement, Purchase Agreement and the transactions contemplated thereby do not purport to be complete and are qualified in their entireties by reference to the Merger Agreement and the Redemption Agreement, respectively.

On May 23, 2011, the Company entered into a Loan and Security Agreement with General Electric Capital Corporation ("GECC") as agent and a lender, and Oxford Finance LLC ("Oxford" and together with GECC, the "Lenders") as a lender, pursuant to which the lenders agreed to make available to the Company $25,000,000 in the aggregate over three term loans. The initial term loan was made on May 23, 2011 in an aggregate principal amount equal to $6,250,000 (the "Initial Term Loan") and is repayable over a term of 42 months, including a six month interest only period. The Initial Term Loan bears interest at 10%. Pursuant to the Agreement, the Company may request two (2) additional term loans, the first, which must be funded not later than November 23, 2011, in an aggregate principal amount equal to $6,250,000 (the "Second Term Loan") and the second, which must be funded not later than May 23, 2012, in an aggregate principal amount equal to $12,500,000 (the "Third Term Loan"). In the event the Second Term Loan is not funded on or before November 23, 2011, the Lenders' commitment to make the Second Term Loan shall be terminated and the total commitment shall be reduced by $6,250,000. In the event the Third Term Loan is not funded on or before May 23, 2012, the Lenders' commitment to make the Third Term Loan shall be terminated and the total commitment shall be further reduced by $12,500,000. Pursuant to the agreement, the Company agreed to issue to the Lenders (or their respective affiliates or designees) stock purchase warrants (collectively, the "Warrants") to purchase in the aggregate a number of shares of our Series A-1 Preferred Stock equal to the quotient of (a) the product of (i) the amount of the applicable term loan multiplied by (ii) four percent (4%) divided by (b) the exercise price equal to $81.42 per share. The exercise period of each Warrant to be issued will expire ten (10) years from the date such Warrants are issued. On May 23, 2011, the Company issued a Warrant to each of GECC and Oxford for the purchase of 3,070 shares of Series A-1 Preferred stock.

Business Overview

Our business is focused on acquiring and developing new therapeutics for the treatment of osteoporosis and other women's health conditions. Our lead product candidate is BA058 Injection for the prevention of fracture in women suffering from osteoporosis. BA058 Injection is a daily subcutaneous injection of our novel synthetic peptide analog of human parathyroid hormone-related protein ("hPTHrP"). In April 2011, we began dosing of patients in a pivotal, multinational Phase 3 clinical study and expect to report top-line data from this study in the first quarter of 2014. Based on our clinical and preclinical results to date, we believe that BA058 stimulates the rapid formation of new high quality bone in patients suffering from osteoporosis and may restore bone into the normal range in patients suffering from osteoporosis. In addition to BA058 Injection, we are developing BA058 Microneedle Patch, a short wear time, transdermal form of BA058 that is delivered by using a microneedle technology from 3M Drug Delivery Systems ("3M"). The BA058 Microneedle Patch is currently being studied in a Phase 1b clinical study which began in December 2010. The BA058 Microneedle Patch may eliminate the need for daily injections and lead to better treatment compliance for patients. We believe that development costs for the BA058 Microneedle Patch will be lower than development costs for BA058 Injection as it will not be necessary to conduct an additional fracture study for this follow-on product. As a result of the compressed pathway for the BA058 Microneedle Patch, we expect that marketing approval of the BA058 Microneedle Patch can occur soon after the BA058 Injection.

Osteoporosis is a disease characterized by low bone mass and structural deterioration of bone tissue, leading to an increase in fractures. The prevalence of osteoporosis is growing in developed nations with the aging of the populations. The National Osteoporosis Foundation ("NOF") has estimated that (i) 10 million people in the United States, comprising eight million women and two

Table of Contents

million are men, already have osteoporosis and another 34 million have low bone mass placing them at increased risk for osteoporosis and (ii) osteoporosis was responsible for more than 2 million fractures in the United States in 2005 resulting in an estimated $19 billion in costs. The NOF expects that the number of fractures due to osteoporosis will rise to more than 3 million by 2025.

In addition to BA058 Injection and BA058 Microneedle Patch, we are currently conducting one other clinical and one preclinical program. Our second clinical stage product candidate is RAD1901, a selective estrogen receptor modulator, or SERM, licensed from Eisai Co ("Eisai") in 2006 which has completed an initial Phase 2 clinical study for the treatment of vasomotor symptoms (commonly referred to as hot flashes) in women entering menopause. A Phase 2 study is designed to test the efficacy of a novel treatment and confirm the safety profile of the drug candidate established in a previous Phase 1 study. Our third product candidate, RAD140, is a pre-IND discovery. RAD140 is a selective androgen receptor modular, or SARM, that is an orally-active androgen agonist on muscle and bone and is a potential treatment for age-related muscle loss, frailty, weight loss associated with cancer cachexia and osteoporosis.

As of the date of this report, we employed seven full-time employees and three part-time employees, four of whom held Ph.D. or M.D. degrees. Four of our employees were engaged in research and development activities and six were engaged in support administration, including business development, and finance. In addition, we intend to use clinical research organizations and third parties to perform our clinical studies and manufacturing.

Corporate Offices

Our executive offices are located at 201 Broadway, 6th Floor, Cambridge, MA 02139. Our telephone number is (617) 551-4700.

Table of Contents

RISK FACTORS

An investment in our Common Stock is very risky. You may lose the entire amount of your investment. Prior to making an investment decision, you should carefully review this entire prospectus and consider the following risk factors. Set forth below are risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements contained in this Prospectus. Because of the following factors, as well as other variables affecting our operating results, past financial performance should not be considered as a reliable indicator of future performance and investors should not use historical trends to anticipate results or trends in future periods:

Risks Relating to our Securities

We have a history of operating losses, expect to incur significant and increasing operating losses in the future, and may never be consistently profitable. We have a limited operating history for you to evaluate our business. We have no approved products and have generated no product revenue from sales. We have primarily incurred operating losses. As of June 30, 2011, we had an accumulated deficit of $102.5 million. We have spent, and expect to continue to spend, significant resources to fund the research and development of BA058 Injection and our other drug candidates. While we may have net income in future periods as the result of non-recurring collaboration revenue, we expect to incur substantial operating losses over the next several years as our clinical trial and drug manufacturing activities increase. As a result, we expect that our accumulated deficit will also increase significantly.

Our drug candidates are in varying stages of preclinical and clinical development and may never be approved for sale or generate any revenue. We will not be able to generate product revenue unless and until one of our drug candidates successfully completes clinical trials and receives regulatory approval. Since even our most advanced drug candidate requires substantial additional clinical development, we do not expect to receive revenue from our drug candidates for several years, if at all. Even if we eventually generate revenues, we may never be profitable, and if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis

There is not now and never has been any market for our securities and an active market may never develop. You may therefore be unable to re-sell shares of our securities at times and prices that you believe are appropriate. There is no market active or otherwise for our Common Stock or our Preferred Stock and neither is eligible for listing or quotation on any securities exchange, automated quotation system (e.g., NASDAQ) or any other over-the-counter market, such as the OTC Bulletin Board® (the "OTCBB") or the Pink Sheets® (the "Pink Sheets"). Even if we are successful in obtaining approval to have our Common stock quoted on the OTCBB, it is unlikely that an active market for our Common Stock will develop any time soon thereafter. Accordingly, our Common Stock is highly illiquid. Because of this illiquidity, you will likely experience difficulty in re-selling such shares at times and prices that you may desire.

There is no assurance that our Common Stock will be listed on NASDAQ or any other securities exchange. We plan to seek listing of our Common Stock on NASDAQ or another national securities exchange or listed for quotation on the OTCBB, as soon as practicable. However, there is no assurance we will be able to meet the initial listing standards of either of those or any other stock exchange or automated quotation systems, or that we will be able to maintain a listing of our Common Stock on either of those or any other stock exchange or automated quotation system. We anticipate seeking a listing of our Common stock on the OTCBB, the Pink Sheets or another over-the-counter quotation system, before our Common Stock is listed on the NASDAQ or a national securities exchange. An investor may find it more difficult to dispose of shares or obtain accurate quotations as to the market value of our Common Stock while our Common Stock is listed on the OTCBB. If our Common Stock is listed on the OTCBB, we would be subject to an SEC rule that, if it failed to meet the criteria set forth in such rule, imposes various practice requirements on broker-dealers who sell securities governed

Table of Contents

by the rule to persons other than established customers and accredited investors. Consequently, such rule may deter broker-dealers from recommending or selling our Common Stock, which may further limit its liquidity. This would also make it more difficult for us to raise additional capital.

Shares of our Capital Stock issued in the Merger are not freely tradable under Securities Laws which will limit stockholders' ability to sell such shares of our Capital Stock. Shares of our Preferred Stock and our Common Stock issued as consideration in the Merger pursuant the Merger Agreement are deemed "Restricted Securities" under the federal securities laws, and consequently such shares may not be resold without registration under the Securities Act of 1933, as amended (the "Securities Act"), or without an exemption from the Securities Act. Further, Rule 144 covering resales of unregistered securities and promulgated under the Securities Act will not be available for resale of our capital stock unless or until one year following the date on which we file the information required by Form 10 as to the performance of our business. In addition, all shares of our Preferred Stock issued in the Merger will be subject to a lock-up provision set forth in the applicable stockholders' agreement (for a description of the material terms of the lock-up provisions, see "Description of Capital Stock Restrictions on Alienability" below). Each certificate evidencing shares of our capital stock to be issued pursuant to the Merger Agreement will bear a restrictive legend as to the nature of the restrictions on the transfer of such shares.

Because we became an operating company by means of a reverse merger, we may not be able to attract the attention of major brokerage firms. Additional risks may exist as a result of our becoming a public reporting operating company through a "reverse merger." Security analysts of major brokerage firms may not provide coverage of our capital stock or business. Because we became a public reporting operating company through a reverse merger, there is no incentive to brokerage firms to recommend the purchase of our Common Stock. No assurance can be given that brokerage firms will want to provide analyst coverage of our capital stock or business in the future.

The resale of shares covered by a registration statement could adversely affect the market price of our Common Stock in the public market, should one develop, which result would in turn negatively affect our ability to raise additional equity capital. The sale, or availability for sale, of our Common Stock in the public market pursuant to a registration statement may adversely affect the prevailing market price of our Common Stock and may impair our ability to raise additional capital by selling equity or equity-linked securities. Once effective, a registration statement will register the resale of a significant number of shares of our Common Stock. The resale of a substantial number of shares of our Common Stock in the public market could adversely affect the market price for our Common Stock and make it more difficult for you to sell shares of our Common Stock at times and prices that you feel are appropriate. Furthermore, we expect that, because there will be a large number of shares registered pursuant to a registration statement, selling stockholders will continue to offer shares covered by such registration statement for a significant period of time, the precise duration of which cannot be predicted. Accordingly, the adverse market and price pressures resulting from an offering pursuant to a registration statement may continue for an extended period of time and continued negative pressure on the market price of our Common Stock could have a material adverse effect on our ability to raise additional equity capital.

We are subject to Sarbanes-Oxley and the reporting requirements of federal securities laws, which can be expensive. As a public reporting company, we are subject to the Sarbanes-Oxley Act of 2002, as well as the information and reporting requirements of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") and other federal securities laws. The costs of compliance with the Sarbanes-Oxley Act and of preparing and filing annual and quarterly reports, proxy statements and other information with the SEC, and furnishing audited reports to stockholders, will cause our expenses to be higher than they would be if we were privately held.

Table of Contents

For so long as shares of our Preferred Stock remain outstanding, if we are sold in a transaction yielding less than the liquidation preference payable in the aggregate to holders of outstanding Preferred Stock, holders of our Common Stock may not receive any proceeds from such transaction and may lose their investment entirely. As of June 30, 2011, we have 591,644 shares of Common Stock; 413,254 shares of Series A-1 Convertible Preferred Stock (the "Series A-1 Preferred Stock"); 983,208 shares of Series A-2 Convertible Preferred Stock (the "Series A-2 Preferred Stock"); 142,227 shares of Series A-3 Convertible Preferred Stock (the "Series A-3 Preferred Stock"); 3,998 shares of Series Convertible A-4 Preferred Stock (the "Series A-4 Preferred Stock"); 6,443 shares of Series A-5 Convertible Preferred Stock (the "Series A-5 Preferred Stock"); assumed warrants to acquire 3,388 shares of Series A-1 Preferred Stock; and assumed warrants to acquire 266 shares of Common Stock. As more fully described herein and in our Certificate of Incorporation, shares of our Preferred Stock outstanding at the time of a sale or liquidation of the Company will have a right to receive proceeds, if any, from any such transactions, before any payments are made to holders of our Common Stock. In the event that there are not enough proceeds to satisfy the entire liquidation preference of our Preferred Stock, holders of our Common Stock will receive nothing in respect of their equity holdings in the Company.

Risks Related to our Business

We currently have no product revenues and will need to raise additional capital to operate our business. To date, we have generated no product revenues. Until, and unless, we receive approval from the U.S. Food and Drug Administration, or FDA, and other regulatory authorities for its product candidates, we cannot sell our drugs and will not have product revenues. Currently, our only product candidates are BA058, RAD1901, and RAD140, and none of these products is approved by the FDA for sale. Therefore, for the foreseeable future, we will have to fund our operations and capital expenditures from cash on hand, licensing fees and grants and potentially, future offerings of our Common Stock or Preferred Stock. Currently, we believe that our cash balance as of June 30, 2011, which includes the $20.4 million in net proceeds received on May 17, 2011 from the first closing of the Series A-1 Financing, plus the proceeds of the two subsequent closings of the Series A-1 Financing which are available to us with no closing or other conditions, are sufficient to fund our operations into the second quarter 2012. However, changes may occur that would consume our available capital before that time, including changes in and progress of our development activities, acquisitions of additional candidates and changes in regulation.

We will need to seek additional sources of financing, which may not be available on favorable terms, if at all. Notwithstanding the expected completion of the subsequent two closings of the Series A-1 Financing, if we do not succeed in timely raising additional funds on acceptable terms, we may be unable to complete planned pre-clinical and clinical trials or obtain approval of any product candidates from the FDA and other regulatory authorities. In addition, we could be forced to discontinue product development, reduce or forego sales and marketing efforts and forego attractive business opportunities. Any additional sources of financing will likely involve the issuance of additional equity securities, which will have a dilutive effect on stockholders.

We are not currently profitable and may never become profitable. We have a history of net losses and expect to incur substantial losses and negative operating cash flow for the foreseeable future, and may never achieve or maintain profitability. For the years ended December 31, 2010 and 2009, we had a net loss of $14.6 million and $15.1 million, respectively. As of June 30, 2011 we had an accumulated deficit of approximately $102.5 million. Even if we succeed in developing and commercializing one or more product candidates, we expect to incur substantial losses for the foreseeable future and may never become profitable. We also expect to continue to incur significant operating and capital expenditures and anticipate that our expenses will increase substantially in the foreseeable future as we:

continue to undertake pre-clinical development and clinical trials for product candidates;

Table of Contents

seek regulatory approvals for product candidates;

implement additional internal systems and infrastructure; and

hire additional personnel.

We also expect to experience negative cash flow for the foreseeable future as we fund our operating losses and capital expenditures. As a result, we will need to generate significant revenues in order to achieve and maintain profitability. We may not be able to generate these revenues or achieve profitability in the future. Our failure to achieve or maintain profitability could negatively impact the value of our securities.

We have a limited operating history upon which to base an investment decision. We are a development-stage company and have not demonstrated an ability to perform the functions necessary for the successful commercialization of any product candidates. The successful commercialization of any product candidates will require us to perform a variety of functions, including:

continuing to undertake pre-clinical development and clinical trials;

participating in regulatory approval processes;

formulating and manufacturing products; and

conducting sales and marketing activities.

Our operations have been limited to organizing and staffing our company, acquiring, developing and securing its proprietary technology and undertaking pre-clinical and clinical trials of our product candidates. These operations provide a limited basis for you to assess our ability to commercialize our product candidates and the advisability of investing further in our securities.

We are heavily dependent on the success of the BA058 Injection, which is still under clinical development. We cannot be certain that BA058 Injection will receive regulatory approval or be successfully commercialized even if we receive regulatory approval. BA058 Injection is our only product candidate in late stage development, and our business currently depends heavily on its successful development, regulatory approval and commercialization. We have no drug products for sale currently and may never be able to develop marketable drug products. The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of drug products are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, which regulations differ from country to country. We are not permitted to market BA058 Injection in the United States until it receives approval of a New Drug Application, or NDA, from the FDA, or in any foreign countries until it receives the requisite approval from such countries. In addition, the approval of BA058 Microneedle Patch as a follow-on product is dependent on an earlier approval of BA058 Injection. We have not submitted an NDA to the FDA or comparable applications to other regulatory authorities. Obtaining approval of an NDA is an extensive, lengthy, expensive and uncertain process, and the FDA may delay, limit or deny approval of BA058 Injection for many reasons, including:

we may not be able to demonstrate that BA058 is safe and effective as a treatment for osteoporosis to the satisfaction of the FDA;

the results of its clinical studies may not meet the level of statistical or clinical significance required by the FDA for marketing approval;

the FDA may disagree with the number, design, size, conduct or implementation of our clinical studies;

the clinical research organization, or CRO, that we retain to conduct clinical studies may take actions outside of our control that materially adversely impact our clinical studies;

Table of Contents

- the FDA may not find the data from preclinical studies and clinical studies sufficient to demonstrate that BA058's clinical and other benefits outweigh its safety risks;

- the FDA may disagree with our interpretation of data from our preclinical studies and clinical studies or may require that we conduct additional studies;

- the FDA may not accept data generated at its clinical study sites;

- if our NDA is reviewed by an advisory committee, the FDA may have difficulties scheduling an advisory committee meeting in a timely manner or the advisory committee may recommend against approval of our application or may recommend that the FDA require, as a condition of approval, additional preclinical studies or clinical studies, limitations on approved labeling or distribution and use restrictions;

- the FDA may require development of a Risk Evaluation and Mitigation Strategy, or REMS, as a condition of approval;

- the FDA may identify deficiencies in the manufacturing processes or facilities of our third-party manufacturers; or

- the FDA may change its approval policies or adopt new regulations.

Before we submit an NDA to the FDA for BA058 as a treatment for osteoporosis, we must initiate and complete our pivotal Phase 3 study, a thorough QT study (a study designed to assess the potential arrhythmia liability of a drug by measuring the effect on the start to finish time of the ventricular main part of the cardiac contraction, also known as the QT interval), a renal safety study, an osteosarcoma study in rats, and bone quality studies in rats and monkey. We have not commenced all of these required studies and the results of these studies will have an important bearing on the approval of BA058. In addition to fracture and BMD, our pivotal Phase 3 study will measure a number of other potential safety indicators, including anti-BA058 antibodies which will have an important bearing on the approval of BA058. In addition, the results from the rat carcinogenicity study, which includes hPTH(1-34), a daily subcutaneous injection of recombinant human parathyroid hormone as a comparator, may show that BA058 dosing results in more osteosarcomas than PTH which may have a material adverse bearing on approval of BA058.

If we do not obtain the necessary U.S. or worldwide regulatory approvals to commercialize any product candidate, we will not be able to sell our product candidates. We cannot assure you that we will receive the approvals necessary to commercialize any of our product candidates (BA058, RAD1901, and RAD140), or any product candidate we acquire or develop in the future. We will need FDA approval to commercialize our product candidates in the U.S. and approvals from the FDA-equivalent regulatory authorities in foreign jurisdictions to commercialize our product candidates in those jurisdictions. In order to obtain FDA approval of any product candidate, we must submit to the FDA an NDA demonstrating that the product candidate is safe for humans and effective for its intended use. This demonstration requires significant research and animal tests, which are referred to as pre-clinical studies, as well as human tests, which are referred to as clinical trials. Satisfaction of the FDA's regulatory requirements typically takes many years, depends upon the type, complexity and novelty of the product candidate and requires substantial resources for research, development and testing. We cannot predict whether our research and clinical approaches will result in drugs that the FDA considers safe for humans and effective for indicated uses. The FDA has substantial discretion in the drug approval process and may require us to conduct additional pre-clinical and clinical testing or to perform post-marketing studies. The approval process may also be delayed by changes in government

Table of Contents

regulation, future legislation or administrative action or changes in FDA policy that occur prior to or during its regulatory review. Delays in obtaining regulatory approvals may:

- delay commercialization of, and our ability to derive product revenues from, our product candidate;
- impose costly procedures on us; and
- diminish any competitive advantages that we may otherwise enjoy.

Even if we comply with all FDA requests, the FDA may ultimately reject one or more of our NDAs. We may never obtain regulatory clearance for any of our product candidates (BA058, RAD1901, and RAD140). Failure to obtain FDA approval of any of our product candidates will severely undermine our business by leaving us without a saleable product, and therefore without any source of revenues, until another product candidate can be developed. There is no guarantee that we will ever be able to develop or acquire another product candidate.

In foreign jurisdictions, we must receive approval from the appropriate regulatory authorities before we can commercialize any drugs. Foreign regulatory approval processes generally include all of the risks associated with the FDA approval procedures described above. We cannot assure you that we will receive the approvals necessary to commercialize our product candidates for sale outside the United States.

Most of our product candidates are in early stages of clinical trials. Except for BA058, each of our other product candidates (RAD1901 and RAD140), are in early stages of development and requires extensive pre-clinical and clinical testing. We cannot predict with any certainty if or when we might submit an NDA for regulatory approval for any of our product candidates or whether any such NDA will be accepted.

Clinical trials are very expensive, time-consuming and difficult to design and implement. Human clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. A substantial portion of our BA058 development costs are denominated in euro and any adverse movement in the dollar/euro exchange rate will result in increased costs and require us to raise additional capital to complete the development of our products. The clinical trial process is also time consuming. We estimate that clinical trials of BA058 Injection will take at least three years to complete. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. The commencement and completion of clinical trials may be delayed by several factors, including:

- unforeseen safety issues;
- determination of dosing issues;
- lack of effectiveness during clinical trials;
- slower than expected rates of patient recruitment;
- inability to monitor patients adequately during or after treatment; and
- inability or unwillingness of medical investigators to follow our clinical protocols.

In addition, we or the FDA may suspend our clinical trials at any time if it appears that we are exposing participants to unacceptable health risks or if the FDA finds deficiencies in our Investigational New Drug, or IND, submissions or the conduct of these trials. Therefore, we cannot predict with any certainty the schedule for future clinical trials.

The results of our clinical trials may not support its product candidate claims. Even if our clinical trials are completed as planned, we cannot be certain that the results will support our product

Table of Contents

candidate claims. Success in pre-clinical testing and early clinical trials does not ensure that later clinical trials will be successful, and we cannot be sure that the results of later clinical trials will replicate the results of prior clinical trials and pre-clinical testing. Our Phase 3 study of BA058 Injection for fracture prevention may not replicate the positive efficacy results for BMD from our Phase 2 study. The clinical trial process may fail to demonstrate that our product candidates are safe for humans and effective for indicated uses. This failure would cause us to abandon a product candidate and may delay development of other product candidates. Any delay in, or termination of, our clinical trials will delay the filing of our NDAs with the FDA and, ultimately, our ability to commercialize our product candidates and generate product revenues. In addition, our clinical trials to date involve a small patient population. Because of the small sample size, the results of these clinical trials may not be indicative of future results.

Physicians and patients may not accept and use our drugs. Even if the FDA approves one or more of our product candidates, physicians and patients may not accept and use it. Acceptance and use of our product will depend upon a number of factors including:

perceptions by members of the health care community, including physicians, about the safety and effectiveness of our drug;

cost-effectiveness of our product relative to competing products;

availability of reimbursement for our product from government or other healthcare payers; and

effectiveness of marketing and distribution efforts by us and its licensees and distributors, if any.

Because we expect sales of our current product candidates, if approved, to generate substantially all of its product revenues for the foreseeable future, the failure of these drugs to find market acceptance would harm our business and could require us to seek additional financing.

Our drug-development program depends upon third-party researcher, investigators and collaborators who are outside our control. We depend upon independent researchers, investigators and collaborators, such as Nordic Bioscience Clinical Development VII A/S ("Nordic"), to conduct our pre-clinical and clinical trials under agreements with us. These third parties are not our employees and we cannot control the amount or timing of resources that they devote to our programs. These third parties may not assign as great a priority to our programs or pursue them as diligently as we would if we were undertaking such programs ourselves. If outside collaborators fail to devote sufficient time and resources to our drug-development programs, or if their performance is substandard, the approval of our FDA applications, if any, and our introduction of new drugs, if any, will be delayed. These collaborators may also have relationships with other commercial entities, some of whom may compete with us. If our collaborators assist competitors at our expense, our competitive position would be harmed.

We will rely exclusively on third parties to formulate and manufacture our product candidate. We have no experience in drug formulation or manufacturing and do not intend to establish our own manufacturing facilities. We lack the resources and expertise to formulate or manufacture our own product candidates. We have entered into agreements with contract manufacturers to manufacture BA058 Injection for use in clinical trial activities. These contract manufacturers are currently our only source for the production and formulation of BA058. We currently do not have sufficient clinical supplies of BA058 to complete the planned Phase 3 study for BA058 Injection but believe that our contract manufacturers will be able to produce sufficient supply of BA058 to complete all of the planned BA058 clinical studies. However, if our contract manufacturers are unable to produce, in a timely manner, adequate clinical supplies to meet the needs of our clinical studies, we would be required to seek new contract manufacturers that may require us to modify our finished product formulation and modify or terminate our clinical studies for BA058. Any modification of our finished product or modification or termination of our Phase 3 clinical study could adversely affect our ability to

Table of Contents

obtain necessary regulatory approvals and significantly delay or prevent the commercial launch of the product, which would materially harm our business and impair our ability to raise capital.

We depend on a number of single source contract manufacturers to supply key components of BA058. For instance, we depend on Lonza Group Ltd. ("Lonza"), which produces supplies of bulk drug product of BA058 to support the BA058 Injection and BA058 Microneedle Patch clinical studies and potential commercial launch. We also depend on Beaufort Ipsen Industrie S.A.S. and its subcontractor VETTER Pharma Fertigung GmbH & Co ("Vetter") for the production of finished supplies of BA058 Injection and we depend on 3M for the production of BA058 Microneedle Patch. Because of our dependence on Vetter for the "fill and finish" part of the manufacturing process for BA058 Injection, we are subject to the risk that Vetter may not have the capacity from time to time to produce sufficient quantities of BA058 to meet the needs of our clinical studies or be able to scale to commercial production of BA058. Because the manufacturing process for BA058 Microneedle Patch requires the use of 3M's proprietary technology, 3M is our sole source for finished supplies of BA058 Microneedle Patch.

While we are currently in discussions, to date, neither we nor our collaborators have entered into a long-term agreement with Lonza, Vetter or 3M, who each currently produces BA058 product on a purchase order basis for us. Accordingly, Lonza, Vetter and 3M could terminate their relationship at any time and for any reason. If our relationship with any of these contract manufacturers is terminated, or if they are unable to produce BA058 in required quantities, on a timely basis or at all, our business and financial condition would be materially harmed. If any of our current product candidates or any product candidates we may develop or acquire in the future receive FDA approval, we will rely on one or more third-party contractors to manufacture its drugs. Our anticipated future reliance on a limited number of third-party manufacturers exposes us to the following risks:

- We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA must approve any replacement contractor. This approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products after receipt of FDA approval, if any.

- Our third-party manufacturers might be unable to formulate and manufacture our drugs in the volume and of the quality required to meet our clinical needs and commercial needs, if any.

- Our future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute its products.

- Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration, and corresponding state agencies to ensure strict compliance with good manufacturing practice and other government regulations and corresponding foreign standards. We does not have control over third-party manufacturers' compliance with these regulations and standards.

- If any third-party manufacturer makes improvements in the manufacturing process for our products, we may not own, or may have to share, the intellectual property rights to the innovation.

Each of these risks could delay our clinical trials, the approval, if any, of our product candidates by the FDA or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenues.

We have no experience selling, marketing or distributing products and no internal capability to do so. We currently have no sales, marketing or distribution capabilities. We do not anticipate having the

Table of Contents

resources in the foreseeable future to allocate to the sales and marketing of our proposed products. Our future success depends, in part, on our ability to enter into and maintain collaborative relationships for such capabilities, the collaborator's strategic interest in the products under development and such collaborator's ability to successfully market and sell any such products. We intend to pursue collaborative arrangements regarding the sales and marketing of our products, however, there can be no assurance that we will be able to establish or maintain such collaborative arrangements, or if able to do so, that they will have effective sales forces. To the extent that we decide not to, or are unable to, enter into collaborative arrangements with respect to the sales and marketing of our proposed products, significant capital expenditures, management resources and time will be required to establish and develop an in-house marketing and sales force with technical expertise. There can also be no assurance that we will be able to establish or maintain relationships with third party collaborators or develop in-house sales and distribution capabilities. To the extent that we depend on third parties for marketing and distribution, any revenues we receive will depend upon the efforts of such third parties, and there can be no assurance that such efforts will be successful. In addition, there can also be no assurance that we will be able to market and sell our products in the United States or overseas.

If we cannot compete successfully for market share against other drug companies, we may not achieve sufficient product revenues and our business will suffer. The market for our product candidates is characterized by intense competition and rapid technological advances. If any of our product candidates receives FDA approval, it will compete with a number of existing and future drugs and therapies developed, manufactured and marketed by others. If we fail to develop BA058 Microneedle Patch, our commercial opportunity for BA058 will be limited. Existing or future competing products may provide greater therapeutic convenience or clinical or other benefits for a specific indication than our products, or may offer comparable performance at a lower cost. If our products fail to capture and maintain market share, we may not achieve sufficient product revenues and our business will suffer.

We will compete against fully integrated pharmaceutical companies and smaller companies that are collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors have oncology compounds already approved or in development. In addition, many of these competitors, either alone or together with their collaborative partners, operate larger research and development programs or have substantially greater financial resources than we do, as well as significantly greater experience in:

developing drugs;

undertaking pre-clinical testing and human clinical trials;

obtaining FDA and other regulatory approvals of drugs;

formulating and manufacturing drugs; and

launching, marketing and selling drugs.

Developments by competitors may render our products or technologies obsolete or non-competitive. The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. Some of the drugs that we are attempting to develop, such as BA058, RAD1901 and RAD140 will have to compete with existing therapies. In addition, a large number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting. We face competition from pharmaceutical and biotechnology companies in the United States and abroad. In addition, companies pursuing different but related fields represent substantial competition. Many of these organizations competing with us have substantially greater capital resources, larger research and development staffs and facilities, longer drug development history in obtaining regulatory approvals and greater manufacturing and marketing capabilities than we do. These organizations also compete with us to attract qualified personnel and parties for acquisitions,

Table of Contents

joint ventures or other collaborations, and therefore, we may not be able to hire or retain qualified personnel to run all facets of our business.

If our efforts to protect our intellectual property related to BA058, RAD1901 and/or RAD140 fail to adequately protect these assets, we may suffer the loss of the ability to license or successfully commercialize one or more of these candidates. Our commercial success is significantly dependent on intellectual property related to that product portfolio. We are either the licensee or assignee of numerous issued and pending patent applications that cover various aspects of our assets including BA058, RAD1901 and RAD140.

Patents covering BA058 as a composition of matter have been issued in the United States (US patent No. 5,969,095), Europe and several additional countries. Because the BA058 composition of matter case was filed in 1996, it is expected to have a normal expiry of approximately 2016 in the United States (this date does not include the possibility of Hatch-Waxman patent term extension of up to 5 years) and additional countries where it has issued.

We and Ipsen Pharma SAS (Ipsen SAS) are also coassignees to US patent No. 7,803,770 that we believe provides exclusivity until 2027 in the United States (absent any extensions) for the method of treating osteoporosis with the intended therapeutic dose for BA058 Injection. Because patents are both highly technical and legal documents that are frequently subject to intense litigation pressure, there is risk that one or more of the issued patents that are believed to cover BA058 Injection when marketed will be found to be invalid, unenforceable and/or not infringed. In the absence of product exclusivity in the market, there is a high likelihood of multiple competitors selling the same product with a corresponding drop in pricing power and/or sales volume.

Currently, additional intellectual property covering the BA058 Microneedle Patch is the subject of a US provisional patent application with a priority date of 2011 and any issued claims resulting from this application will expire no earlier than 2031. However, pending patent applications in the United States and elsewhere may not issue since the interpretation of the legal requirements of patentability in view claimed inventions are not always predictable. Additional intellectual property covering the BA058 Microneedle Patch technology exists in the form of proprietary information contained by trade secrets. These can be accidentally disclosed to, independently derived by or misappropriated by competitors, possibly reducing or eliminating the exclusivity advantages of this form of intellectual property, thereby allowing those competitors more rapid entry into the market place with a competitive product thus reducing our marketing advantage of the BA058 Microneedle Patch. In addition, trade secrets may in some instances become publicly available required disclosures in regulatory files. Alternatively, competitors may sometimes reverse engineer a product once it becomes available on the market. Even where a competitor does not use an identical technology for the delivery of BA058, it is possible that they could achieve an equivalent or even superior result using another technology. Such occurrences could lead to either one or more alternative competitor products available on the market and/or one or more generic competitor products on the market with a corresponding decrease in market share and/or price for the BA058 Microneedle Patch.

Patents covering RAD1901 as a composition of matter have been issued in the United States, Australia and is pending in Europe and several additional countries. The RAD1901 composition of matter patent in the United States expires in 2025 (not including any Hatch-Waxman extension). Additional patent applications relating to methods of treating vasomotor symptoms, clinical dosage strengths and combination treatment modalities all covering RAD1901 have been filed. Since patents are both highly technical and legal documents that are frequently subject to intense litigation pressure, there is risk that one or more of the issued patents that are believed to cover RAD1901 when marketed will be found to be invalid, unenforceable and/or not infringed when subject to said litigation. In the absence of product exclusivity in the market, there is a high likelihood of multiple competitors selling the same product with a corresponding drop in pricing power and/or sales volume. Pending

Table of Contents

patent applications in the United States and elsewhere may not issue since the interpretation of the legal requirements of patentability in view of any claimed invention before that patent office are not always predictable. As a result, we could encounter challenges or difficulties in building, maintaining and/or defending its intellectual property rights protecting and defending our intellectual property both in the United States and abroad.

Patent applications covering RAD140 and other SARM compounds that are part of the SARM portfolio have been filed in the United States and elsewhere. Since the RAD140 composition of matter case was effectively filed in 2009, if issued, it is expected to have a normal expiry of approximately 2029 in the United States (this does not include the possibility of USPTO patent term adjustment or Hatch-Waxman extension) and additional countries if/when it issues. Since patents are both highly technical and legal documents that are frequently subject to intense litigation pressure, there is risk that even if one or more RAD140 patents does issue and is asserted that the patent(s) will be found invalid, unenforceable and/or not infringed when subject to said litigation. Finally, the intellectual property laws and practices can vary considerably from one country to another and also can change with time. As a result, we could encounter challenges or difficulties in building, maintaining and/or defending its intellectual property rights protecting and defending our intellectual property both in the United States and abroad.

Payments, fees, submissions and various additional requirements must be met in order for pending patent applications to advance in prosecution and issued patents to be maintained. Rigorous compliance with these requirements is essential to procurement and maintenance of patents integral to the product portfolio. Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will come due for payment periodically throughout the lifecycle of patent applications and issued patents. In order to help ensure that we comply with any required fee payment, documentary and/or procedural requirements as they might relate to any patents for which we is an assignee or co-assignee, we employ competent legal help and related professionals as needed to comply with those requirements. Our outside patent counsel uses Computer Packages, Inc. for patent annuity payments. Failure to meet a required fee payment, document production of procedural requirement can result in the abandonment of a pending patent application or the lapse of an issued patent. In some instances the defect can be cured through late compliance but there are situations where the failure to meet the required event cannot be cured. Such an occurrence could compromise the intellectual property protection around a preclinical or clinical candidate and possibly weaken or eliminate our ability to protect our eventual market share for that product.

If we infringe the rights of third parties we could be prevented from selling products, forced to pay damages, and defend against litigation. If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs and may have to:

obtain licenses, which may not be available on commercially reasonable terms, if at all;

abandon an infringing drug candidate;

redesign its products or processes to avoid infringement;

stop using the subject matter claimed in the patents held by others;

pay damages; or

defend litigation or administrative proceedings which may be costly whether we win or lose and which could result in a substantial diversion of its financial and management resources.

Table of Contents

Our ability to generate product revenues will be diminished if our drugs sell for inadequate prices or patients are unable to obtain adequate levels of reimbursement. Our ability to commercialize its drugs, alone or with collaborators, will depend in part on the extent to which reimbursement will be available from:

- government and health administration authorities;
- private health maintenance organizations and health insurers; and
- other healthcare payers.

Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Healthcare payers, including Medicare, are challenging the prices charged for medical products and services. Government and other healthcare payers increasingly attempt to contain healthcare costs by limiting both coverage and the level of reimbursement for drugs. Even if one of our product candidates is approved by the FDA, insurance coverage may not be available, and reimbursement levels may be inadequate, to cover such drug. If government and other healthcare payers do not provide adequate coverage and reimbursement levels for one of our products, once approved, market acceptance of such product could be reduced.

We may not successfully manage our growth. Our success will depend upon the expansion of our operations and the effective management of its growth, which will place a significant strain on our management and on administrative, operational and financial resources. To manage this growth, we may be required to expand our facilities, augment our operational, financial and management systems and hire and train additional qualified personnel. If we are unable to manage this growth effectively, our business would be harmed.

We may be exposed to liability claims associated with the use of hazardous materials and chemicals. Our research and development activities may involve the controlled use of hazardous materials and chemicals. Although we believe that our safety procedures for using, storing, handling and disposing of these materials comply with federal, state and local laws and regulations, we cannot completely eliminate the risk of accidental injury or contamination from these materials. In the event of such an accident, we could be held liable for any resulting damages and any liability could materially adversely affect its business, financial condition and results of operations. In addition, the federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous or radioactive materials and waste products may require us to incur substantial compliance costs that could materially adversely affect its business, financial condition and results of operations.

We rely on key executive officers and scientific and medical advisors, and their knowledge of our business and technical expertise would be difficult to replace. We are highly dependent on its principal scientific, regulatory and medical advisors. We do not have "key person" life policies for any of our officers. The loss of the technical knowledge and management and industry expertise of any of our key personnel could result in delays in product development, loss of customers and sales and diversion of management resources, which could adversely affect our operating results.

If we are unable to hire additional qualified personnel, our ability to grow our business may be harmed. We will need to hire additional qualified personnel with expertise in pre-clinical testing, clinical research and testing, government regulation, formulation and manufacturing and sales and marketing. We compete for qualified individuals with numerous biopharmaceutical companies, universities and other research institutions. Competition for such individuals is intense, and we cannot be certain that our search for such personnel will be successful. Attracting and retaining qualified personnel will be critical to our success.

Table of Contents

We may incur substantial liabilities and may be required to limit commercialization of our products in response to product liability lawsuits. The testing and marketing of medical products entail an inherent risk of product liability. If we cannot successfully defend our self against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of pharmaceutical products we develop, alone or with collaborators.

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Prospectus, including the information incorporated by reference herein, contains, in addition to historical information, forward-looking statements. We may, in some cases, use words such as "project," "believe," "anticipate," "plan," "expect," "estimate," "intend," "continue," "should," "would," "could," "potentially," "will," "may" or similar words and expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements in this Prospectus may include, among other things, statements about:

- *the progress of, timing of and amount of expenses associated with our research, development and commercialization activities;*
- *the success of our clinical studies for our product candidates;*
- *our ability to obtain U.S. and foreign regulatory approval for our product candidates and the ability of our product candidates to meet existing or future regulatory standards;*
- *our expectations regarding federal, state and foreign regulatory requirements;*
- *the therapeutic benefits and effectiveness of our product candidates;*
- *the safety profile and related adverse events of our product candidates;*
- *our ability to manufacture sufficient amounts of BA058, RAD1901, and RAD140 for commercialization activities with target characteristics;*
- *our plans with respect to collaborations and licenses related to the development, manufacture or sale of our product candidates;*
- *our expectations as to future financial performance, expense levels and liquidity sources;*
- *our ability to compete with other companies that are or may be developing or selling products that are competitive with our product candidates;*
- *anticipated trends and challenges in our potential markets;*
- *our ability to attract and motivate key personnel; and*
- *other factors discussed elsewhere in this Prospectus.*

The outcome of the events described in these forward-looking statements is subject to known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from the results anticipated by these forward-looking statements. These important factors include our financial performance, our ability to attract and retain customers, our development activities and those factors we discuss in this Prospectus under the caption "Risk Factors." You should read these factors and the other cautionary statements made in this Prospectus as being applicable to all related forward-looking statements wherever they appear in this Prospectus. These risk factors are not exhaustive and other sections of this Prospectus may include additional factors which could adversely impact our business and financial performance.

You should read the following discussion of our financial condition and results of operations in conjunction with our financial statements and related notes set forth in this report.

Table of Contents

DESCRIPTION OF THE BUSINESS OF RADIUS HEALTH, INC.

EXPLANATORY NOTE: *Unless otherwise provided in this current report, all references in the balance of this Registration Statement to "we," "us," "our company," "our," or the "Company" refer to the combined Radius Health, Inc. entity after giving effect to the Merger and the Short-Form Merger.*

Overview

We are a pharmaceutical company focused on acquiring and developing new therapeutics for the treatment of osteoporosis and other women's health conditions. Our lead product candidate is BA058 Injection, a daily subcutaneous injection of our novel synthetic peptide analog of human parathyroid hormone-related peptide, or hPTHrP, a naturally-occurring bone building hormone, for the treatment of osteoporosis. In April 2011, we began dosing of patients in a pivotal, multinational Phase 3 clinical study. A Phase 3 clinical study is designed to show advantages of a novel therapy over an inactive placebo and/or an existing therapy for the same medical indication and to identify any additional side effects not determined in earlier clinical trials. We expect to report top-line data from this Phase 3 clinical study in the first quarter of 2014. Based on our clinical and preclinical results to date, we believe that BA058 stimulates the rapid formation of new high quality bone in patients suffering from osteoporosis and may restore bone mineral density, or BMD, in these patients into the normal reference range. In addition to BA058 Injection, we are developing BA058 Microneedle Patch, a short wear time, transdermal form of BA058 that is delivered using a microneedle technology from 3M. BA058 Microneedle Patch is being studied in a Phase 1b clinical study which began in December 2010. The BA058 Microneedle Patch may eliminate the need for daily injections and lead to better treatment compliance for patients. We believe that development costs for the BA058 Microneedle Patch will be lower than the development costs for BA058 Injection as it will not be necessary to conduct an additional fracture study for registration of this follow-on product. As a result of the compressed pathway for the BA058 Microneedle Patch, we expect that marketing approval of the BA058 Microneedle Patch can occur soon after the BA058 Injection.

While there are a number of drugs that help to reduce the rate of bone loss in patients suffering from osteoporosis, there are few that are able to build bone. The only approved therapy in the United States that increases BMD into the normal reference range in these patients is Forteo®, a daily subcutaneous injection of recombinant human parathyroid hormone, or rhPTH(1-34). The product is marketed by Eli Lilly and had reported worldwide sales of $830 million in 2010. We believe that BA058 may offer a number of important advantages over Forteo®, including greater efficacy, a faster benefit, a shorter course of therapy, an improved safety profile and no need to refrigerate in use BA058 Injection. We believe, if approved, the BA058 Injection and the BA058 Microneedle Patch will offer an attractive bone anabolic treatment option for prescribing physicians and women with compelling advantages in safety, efficacy and delivery over Forteo®.

Based upon guidance we have received from the United States Food and Drug Administration, or the FDA, and the European Medicines Agency, or the EMA, we believe that a single pivotal placebo-controlled, comparative Phase 3 study will be sufficient to support registration of BA058 Injection for the treatment of osteoporosis in both the United States and the European Union. Our planned study will enroll a total of 2,400 patients to be randomized equally to receive daily doses of one of the following: 80 micrograms (µg) of BA058, a matching placebo, or the approved dose of 20 µg of Forteo® for 18 months. The study will be designed to support, or not, our belief that BA058 is superior to (i) placebo for fracture and (ii) Forteo® for greater BMD improvement at major skeletal sites and for a lower occurrence of hypercalcemia, a condition in which the calcium level in a patient's blood is above normal. We believe that the study will also show that BMD gains for BA058 patients will be earlier than for Forteo® patients.

Table of Contents

Market Opportunity for BA058

Osteoporosis is a disease characterized by low bone mass and structural deterioration of bone tissue, leading to an increase in fractures. The prevalence of osteoporosis is growing in developed nations with the aging of the populations. The NOF has estimated that (i) 10 million people in the United States, comprising eight million women and two million men, already have osteoporosis and another 34 million have low bone mass placing them at increased risk for osteoporosis and (ii) osteoporosis was responsible for more than 2 million fractures in the United States in 2005 resulting in an estimated $19 billion in costs. The NOF expects that the number of fractures due to osteoporosis will rise to 3 million by 2025.

In 2011, Cowen and Company, an investment banking firm, estimated that total worldwide sales of osteoporosis products was $7.6 billion in 2010. There are two main types of osteoporosis drugs now available in the United States: (i) anti-resorptive agents such as bisphosphonates including Actonel®, Boniva® or Reclast®, and Prolia® (a nuclear factor kB ligand, or RANKL, inhibitor marketed by Amgen), as well as calcitonins and selective estrogen receptor modulators such as Evista® marketed by Lilly; and (ii) anabolic agents, with Forteo® being the only approved drug of this type. Anti-resorptive agents act to prevent further bone loss by inhibiting the breakdown of bone whereas anabolic agents stimulate bone formation to build high quality, new bone. The use of bisphosphonates have been associated with infrequent but serious adverse events such as osteonecrosis of the jaw, atrial fibrillation and anomalous fractures resulting from "frozen bone" that have created increasing concern with physicians and patients. Many physicians are seeking alternatives to current anti-resorptive therapies and we believe this will drive greater demand for bone anabolic agents in the future. We believe that there is a significant opportunity for a new anabolic agent such as BA058 that will increase bone mineral density to a greater degree and at a faster rate than Forteo® with added advantages in convenience and safety.

Our Strategy

We plan to build a pharmaceutical company focused on acquiring and developing new therapeutics for osteoporosis and women's health by:

- Completing the single, pivotal Phase 3 clinical trial of BA058 Injection for the treatment of osteoporosis in the first quarter of 2014;
- Pursuing the clinical development of BA058 Microneedle Patch as a follow-on product for the treatment of osteoporosis;
- Obtaining regulatory approval of BA058 Injection and BA058 Microneedle Patch for the treatment of osteoporosis, initially in the United States and subsequently in the European Union;
- Collaborating with third parties for the worldwide commercialization of BA058; and
- Collaborating with third parties for the further development and commercialization of RAD1901 and RAD140 on a worldwide basis.

To execute on our strategy, we have built a strong management team and Board of Directors with significant pharmaceutical development, regulatory and commercial experience.

Our Solution

In addition to BA058 Injection and BA058 Microneedle Patch, we are currently conducting one other clinical and one preclinical program. Our second clinical stage product candidate is RAD1901, a selective estrogen receptor modulator, or SERM, which we licensed from Eisai in 2006. We previously completed an initial Phase 2 clinical study for the treatment of vasomotor symptoms (commonly known as hot flashes) in women entering menopause. A Phase 2 study is designed to test the efficacy of a novel treatment and to confirm the safety profile established in a Phase 1 study. Our third product

Table of Contents

candidate, RAD140, is a pre-Investigational New Drug, or IND, Application discovery stage of development. RAD140 is a selective androgen receptor modular, or SARM, that is an orally-active androgen agonist on muscle and bone and is a potential treatment for age-related muscle loss, frailty, weight loss associated with cancer cachexia and osteoporosis.

The following table summarizes the target indications, dosage forms, and stages of development for our product candidates.

Radius Product Pipeline

Research and Development Expenses

The following table sets forth our research and development expenses related to BA058 injection, BA058 Microneedle Patch, RAD1901 and RAD140 for the years ended December 31, 2009 and 2010 and the six months ended June 30, 2010 and 2011. We began tracking program expenses for BA058 Injection in 2005, and program expenses from inception to June 30, 2011 were approximately $43.1 million. We began tracking program expenses for BA058 Microneedle Patch in 2007, and program expenses from inception to June 30, 2011 were approximately $8.2 million. We began tracking program expenses for RAD1901 in 2006, and program expenses from inception to June 30, 2011 were approximately $15.3 million. We began tracking program expenses for RAD140 in 2008, and program expenses from inception to June 30, 2011 were approximately $5.2 million. These expenses relate primarily to external costs associated with manufacturing, preclinical studies and clinical trial costs. Costs related to facilities, depreciation, share-based compensation, and research and development support services are not directly charged to programs as they benefit multiple research programs that share resources.

	Year ended December 31,		Six Months ended June 30,	
	2009	2010	2010	2011
	(in thousands)			
BA058 Injection	$ 3,671	$ 4,664	$ 661	$ 16,774
BA058 Microneedle Patch	2,819	1,863	857	2,758
RAD1901	2,185	1,654	1,040	
RAD140	2,031	313	287	23

See "Management's Discussion and Analysis Financial Overview Research and Development Costs" for a more detailed discussion related to our research and development expenses and uncertainties related to predicting how much research and development expense we may incur in connection with our existing or future, in any, product candidates.

Table of Contents

BA058

BA058 is a novel synthetic peptide analog of human Parathyroid hormone-related peptide, or hPTHrP, being developed by us as a bone anabolic treatment for osteoporosis. hPTHrP is critical in the formation of the embryonic skeleton and is involved in the regulation of bone formation, able to rebuild bone with low associated risk of inducing the presence of too much calcium in the blood, known as hypercalcemia, as a side-effect. Human PTHrP is different to hPTH in its structure and role. In 2009, the medical journal, Nature Chemical Biology, published results of a study indicating that PTH and PTHrP activate the same PTHR1 receptor but produce divergent effects in bone due to differences in downstream cell signaling. We believe that BA058 is the most advanced hPTHrP analog in clinical development for the treatment of osteoporosis. We acquired and maintain exclusive worldwide rights (except Japan) to certain patents, data and technical information related to BA058 through a license agreement with SCRAS SAS, a French corporation on behalf of itself and its affiliates (together with Ipsen SAS and its other affiliates) dated September 2005. Based on clinical and preclinical data to date, we believe that BA058 has the following important potential advantages over Forteo® rhPTH(1-34), the only approved anabolic agent for osteoporosis in the US:

Greater efficacy,

Faster benefit,

Shorter treatment duration,

Less hypercalcemia,

No additional safety risks, and

No refrigeration required in use.

BA058 Injection

In August 2009, we announced positive Phase 2 data that showed BA058 Injection produced faster and greater BMD increases at the spine and the hip after 6 months and 12 months of treatment than did Forteo®, which was a comparator in our study. Key findings were that the highest dose of BA058, which was 80 μg, increased mean lumbar spine BMD at 6 and 12 months by 6.7% and 12.9% compared to the increases seen with Forteo® trial arms of 5.5% and 8.6%, respectively. BA058 also produced increases in mean femoral neck BMD at the hip at 6 and 12 months of 3.1% and 4.1% compared to increases for Forteo® of 1.1% and 2.2%, respectively. We believe there to be a strong correlation between an increased level of BMD and a reduction in the risk of fracture for patients with osteoporosis. BA058 was generally safe and well tolerated in this study, with adverse events similar between the BA058, placebo and Forteo® groups. In addition, the occurrence of hypercalcemia as a side-effect was half that seen with Forteo® for the 80 μg dose of BA058.

In March 2011, we entered an agreement with Nordic Bioscience, or Nordic, to manage the Phase 3 study of BA058 Injection. The study will be conducted in 10 countries at 13 centers operated by the Center for Clinical and Basic Research, or CCBR. CCBR is a leading global clinical research organization with extensive experience in global osteoporosis registration studies. We expect to report top-line data from the Phase 3 study of BA058 Injection in the first quarter of 2014. Before we submit an NDA to the FDA for BA058 as a treatment for osteoporosis, we must complete our pivotal Phase 3 study, a thorough QT study, a renal safety study, an osteosarcoma study in rats, and bone quality studies in rats and monkey. We have not commenced all of these required studies and the results of these studies will have an important bearing on the approval of BA058.

The FDA approval process is lengthy and expensive. While the date of FDA approval of BA058 cannot be predicted, FDA approval is not expected before late 2015 and may not be granted, if ever, for several years thereafter. If we do not obtain the necessary regulatory approvals to commercialize

Table of Contents

BA058, we will not be able to sell the product candidate. Given BA058 is our lead product candidate and the only one currently in late stage development, failure to obtain FDA approval of BA058 will severely undermine our business by leaving us without a saleable product, and therefore without any source of revenues, until another product candidate can be developed. There is no guarantee that we will ever be able to develop or acquire another product candidate. See our discussion of timing of approval, including factors that may result in potential delays, and related research and development costs matters set forth in this registration statement under "Management's Discussion and Analysis Financial Overview Research and Development Costs". As result of the uncertainties discussed there, we are unable to determine the duration and costs to complete current or future clinical stages of our BA058 product candidate or when, or to what extent, we will generate revenues from the commercialization and sale of any of BA058. Notwithstanding the foregoing, future research and development costs related to BA058 Injection is estimated to be at least an additional $160 million. From January 1, 2009 through June 30, 2011, we have incurred $25.1 million in research and development costs related to BA058 Injection. Any failure by us to obtain, or any delay in obtaining, regulatory approvals for BA058 Injection would significantly increase our need to raise additional working capital funds and materially adversely affect our product development efforts and our business overall. Our continued operations, including the development of the BA058 Injection, will depend on whether we are able to raise additional funds through various potential sources, such as equity and debt financing and potential collaboration agreements. We will seek to continue to fund operations from cash on hand and through additional equity and/or debt financing and potential collaboration agreements To date, a significant portion of our financing has been through private placements of Preferred Stock. We can give no assurances that any additional capital that we are able to obtain will be sufficient to meet our needs. If we do not succeed in timely raising additional funds on acceptable terms, we may be unable to complete planned pre-clinical and clinical trials or obtain approval of any product candidates from the FDA and other regulatory authorities. In addition, we could be forced to discontinue product development, reduce or forego sales and marketing efforts and forego attractive business opportunities. Any additional sources of financing will likely involve the issuance of additional equity securities, which will have a dilutive effect on stockholders.

BA058 Microneedle Patch

In December 2010, we initiated a combined single and seven-day repeat-dose Phase 1 clinical study of the BA058 Microneedle Patch in healthy subjects with top-line data expected to be available in the fourth quarter of 2011. Following this Phase 1 study, we plan to select a dose range to conduct a Phase 2 clinical study comparing multiple daily doses of the BA058 Microneedle Patch to placebo and BA058 Injection using lumbar spine BMD at 6 months as the primary endpoint. We expect to begin the Phase 2 BA058 Microneedle Patch clinical study in mid 2012 with top-line data available in mid 2013. If the BA058 Injection product is already approved by the FDA, we believe that we will only need to conduct a single non-inferiority Phase 3 clinical study comparing the change in lumbar spine BMD at 12 months for patients dosed with the BA058 Microneedle Patch to patients dosed with the BA058 Injection to show that the effect of the BA058 Microneedle Patch treatment is not worse than that of BA058 Injection.

We believe that development costs for the BA058 Microneedle Patch will be lower than the injectable version as it will not be necessary to conduct an additional fracture study for this follow-on product. As a result of the compressed pathway, we expect that marketing approval of the BA058 Microneedle Patch can occur soon after the BA058 Injection. Therefore, the FDA approval, and the timing of any such approval, is dependent upon the approval of BA058 Injection and therefore is not likely to receive FDA approval, if ever, until at least two years following approval of BA058 Injection, however, any such time estimate is subject to the same potential delays discussed under Management's Discussion and Analysis Financial Overview Research and Development Costs". As result of the uncertainties discussed there, we are unable to determine the costs to complete current or future

Table of Contents

clinical stages of the BA058 Microneedle Patch candidate or when, or to what extent, we will generate revenues from the commercialization and sale of any of BA058. Notwithstanding the foregoing, future research and development costs related to BA058 Microneedle Patch is estimated to be at least an additional $50 million. From January 1, 2009 through June 30, 2011, we have incurred $7.4 million in research and development costs related to the BA058 Microneedle Patch. Any failure by us to obtain, or any delay in obtaining, regulatory approvals for BA058 Microneedle Patch could significantly increase our need to raise additional working capital funds and materially adversely affect our product development efforts and our business overall. Our continued operations, including the development of the BA058 Microneedle Patch, will depend on whether we are able to raise additional funds through various potential sources, such as equity and debt financing and potential collaboration agreements. We will seek to continue to fund operations from cash on hand and through additional equity and/or debt financing and potential collaboration agreements. To date, a significant portion of our financing has been through private placements of Preferred Stock. We can give no assurances that any additional capital that we are able to obtain will be sufficient to meet our needs. If we do not succeed in timely raising additional funds on acceptable terms, we may be unable to complete planned pre-clinical and clinical trials or obtain approval of any product candidates from the FDA and other regulatory authorities. In addition, we could be forced to discontinue product development, reduce or forego sales and marketing efforts and forego attractive business opportunities. Any additional sources of financing will likely involve the issuance of additional equity securities, which will have a dilutive effect on stockholders.

Background on Osteoporosis

Osteoporosis is a disease characterized by low bone mass and structural deterioration of bone tissue, which can lead to an increase in fractures. A bone density test is the only non-invasive test that can diagnose osteoporosis before a broken bone occurs and is reported using T-scores. The test uses a procedure called bone densitometry (DXA) performed in the radiology or nuclear medicine departments of hospitals or clinics. A BMD t-score is the number of standard deviations above or below the mean BMD for a healthy 30 year old adult of the same sex and ethnicity as the patient. A t-score of -1.0 or above is normal bone density, whereas a t-score of -2.5 or below is a diagnosis of osteoporosis.

On its website, www.nof.org, the National Osteoporosis Foundation (NOF) has estimated that 10 million people in the United States, comprising eight million women and two million men, already have osteoporosis and another 34 million have low bone mass placing them at increased risk for osteoporosis and broken bones. All bones become more fragile and susceptible to fracture as the disease progresses. People tend to be unaware that their bones are getting weaker, and a person with osteoporosis can fracture a bone from even a minor fall. Fractures due to osteoporosis are most likely to occur in the hip, spine and wrist. According to the NOF: osteoporosis was responsible for more than 2 million fractures in the United States in 2005; vertebral (spinal) fractures may result in severe back pain, loss of height or spinal deformities; there were approximately 293,000 Americans age 45 and over admitted to hospitals in 2005 with a fracture of the femoral neck, a common type of hip fracture that is associated with osteoporosis; a women's lifetime risk of a hip fracture is equal to her combined risk of breast, uterine and ovarian cancer; and an average of 24 percent of hip fracture patients aged 50 and over dies in the year following their fracture, while additional 20 percent of patients who were ambulatory before their hip fracture require long-term care.

The debilitating effects of osteoporosis have substantial costs. Loss of mobility, admission to nursing homes and dependence on caregivers are all common consequences of osteoporosis. The NOF has estimated that osteoporosis-related fractures were responsible for $19 billion in costs in 2005.

The prevalence of osteoporosis is growing and, according to the NOF, is significantly under-recognized and under-treated in the population. While the aging of the population is a primary driver of an increase in cases, osteoporosis is also increasing from the use of drugs that induce bone loss, such

Table of Contents

as chronic use of glucocorticoids for asthma, aromatase inhibitors that are increasingly used for breast cancer and the hormone therapies used for prostate cancer.

The range of treatment and prevention options for osteoporosis has expanded in recent years from anti-resorptive drugs that act to prevent bone loss by blocking bone resorption, which is the process by which bone is broken down in the body and the resulting minerals, including calcium, are released into the blood, and now includes bisphosphonates, selective estrogen receptor modulators, calcitonins, and most recently in 2010, a genetic-based therapy known as receptor activator of nuclear factor kappa-B ligand, known as a RANKL inhibitor. Bisphosphonates remain the current standard of care with 2010 world-wide total sales of approximately $4.2 billion according to Cowen and Company's report dated March 2011 and entitled Therapeutic Categories Outlook, led by Actonel®, Boniva®, and Fosamax®. Generic versions of Fosamax® (alendronate) became available in the US in 2008 and have now gained share from branded oral bisphosphonates.

The only anabolic (i.e., stimulating bone formation) drug approved in the U.S. for osteoporosis is Forteo®, which was approved by the FDA in December 2002. In 2011, the medical journal, *Osteoporosis International*, published results of a study indicating that patients' preferences for osteoporosis medications are strongly influenced by the mode of administration. In particular, when given the choice of subcutaneously injected Forteo® versus other therapies, patients preferred the alternative drugs over Forteo, which requires once-daily, self-administered injections and must be refrigerated for storage in use. We believe that this research suggests that there is a substantial opportunity to optimize patient outcomes and expand the market by improved treatment compliance with a bone anabolic drug that offers an alternative to daily injection, is room-temperature-stable and requires a shorter treatment duration, such as the BA058 Microneedle Patch. Forteo® had world-wide sales of $594 million in 2006 and grew to $830 million in sales for 2010.

Clinical Development Program for BA058

Radius is developing BA058 for the prevention of fractures in postmenopausal women at risk of fracture from severe osteoporosis. Recognizing both the therapeutic potential of BA058 in this indication as well as the drawbacks inherent in self-injection therapies in this population, Radius is also developing the BA058 Microneedle Patch for transdermal administration of the product using a microneedle technology from 3M. We plan to develop and register BA058 Injection as our lead product, with the BA058 Microneedle Patch as a fast-following product that provides greater patient convenience. The ability of the Microneedle Patch to capitalize on the more extensive fracture study data of BA058 Injection will allow the patch product to be accelerated though later phase development without requiring its own fracture study.

Planned and Completed BA058 Studies

Planned Studies
BA058 Injection, Phase 3

The Phase 3 study for BA058 Injection (Study BA058-05-003) was submitted as a draft protocol to IND 73,176 on December 18, 2009, and was the subject of a Type B End of Phase 2 Meeting conducted with the FDA on January 21, 2010. The protocol was subsequently revised and submitted to the FDA on December 17, 2010. The study is planned to enroll 2,400 patients at 13 medical centers in 10 countries in Europe, Latin America and Asia.

Study Objectives

The primary objective of this study is to determine the safety and efficacy of BA058 Injection at a dose of 80 μg when compared to a matching placebo for prevention of vertebral fracture in otherwise healthy ambulatory postmenopausal women at risk of fracture from severe osteoporosis. Patients,

Table of Contents

investigators and independent assessors will be blinded as to treatment for that outcome. The secondary objectives of this study are to determine the safety and efficacy of BA058 at a dose of 80 µg when compared to placebo for prevention of non-vertebral fractures and for change in vertical height. Additional key secondary efficacy outcomes include BMD of spine, hip and femoral neck and hypercalcemia when compared to Forteo®.

Study Population

The study will enroll otherwise healthy ambulatory postmenopausal (≥ 5 years) women from 50 to 85 years of age (inclusive) who meet the study entry criteria and have provided written informed consent. The women will have a BMD T-score ≤ -2.5 and > -5.0 at the lumbar spine or hip (femoral neck) by DXA and radiological evidence of two or more mild or one or more moderate lumbar or thoracic vertebral fractures, or history of low trauma forearm, humerus, sacral, pelvic, hip, femoral, or tibial fracture within the past 5 years. Postmenopausal women older than 65 who meet the above fracture criteria but have a T-score ≤ -2.0 and > -5.0 may be enrolled. Women older than 65 who do not meet the fracture criteria may also be enrolled if their T-score is ≤ -3.0 and > -5.0. Osteoporosis is defined as when a patient's T-score is -2.5 or lower, meaning that the patient has a BMD that is two and a half standard deviations below the mean of a thirty year old man or woman, as applicable.

All patients are to be in good general health as determined by medical history, physical examination (including vital signs) and clinical laboratory testing.

Study Design

The planned 2,400 eligible patients will be randomized equally to receive one of the following: BA058 at a dose of 80 µg, a matching placebo, or Forteo® at a dose of 20 µg for 18 months. Study drug will be blinded to patients and medical personnel until the randomization process is completed. Treatment with BA058 at a dose of 80 µg or placebo will remain blinded to all parties throughout the study. Forteo® comes as a proprietary prefilled drug and device combination that cannot be repackaged and therefore, its identity cannot be blinded to treating physicians and patients once use begins. Study medication will be self-administered daily by subcutaneous, or SC, injection for a maximum of 18 months.

The dosages of study medications and the number of patients per group are shown in below.

Study BA058-05-003 Medication Doses and Number of Patients per Group

Treatment Regimen	Study Medication	Daily Dose (SC)	Duration	Number of Patients
1	BA058	80 µg	18 months	800
2	Placebo		18 months	800
3	Forteo®	20 µg	18 months	800
			Total	2,400

All enrolled patients will also receive Calcium and Vitamin D supplementation from the time of enrollment until the end of the Treatment Period; it will be recommended to patients that they also continue these supplements through the one month follow-up period.

Primary Efficacy Outcomes

The primary efficacy endpoint will be the number of BA058-treated patients showing new vertebral fractures at End-of-Treatment when compared to placebo as evaluated by a blinded assessor according to a standardized graded scale of severity of the vertebral deformity. The sample size per treatment

Table of Contents

arm provides 90% power at a two-sided alpha to detect a superiority difference between placebo patients and those who receive BA058 at a dose of 80 μg on vertebral fracture incidence.

Secondary Efficacy Endpoints

Secondary efficacy parameters will also include reduction in the incidence of non-vertebral fractures to the wrist, hip and rib, for example, and reduction in moderate and severe vertebral fractures. Other secondary efficacy endpoints will include changes in BMD of the spine, hip, femoral neck and wrist from baseline to end-of-treatment as assessed by DXA.

Additional secondary endpoints will include change in standing height and changes in serum bone formation markers across treatment, such as N-terminal propeptide of type I procollagen PINP, osteocalcin and bone-specific alkaline phosphatase. The frequency of hypercalcemia across treatment groups will also be assessed.

Safety Outcomes

Safety evaluations to be performed will include physical examinations, vital signs, 12-lead electrocardiograms, or ECGs, clinical laboratory tests and monitoring and recording of adverse events. Specific safety assessments will include post-dose (4 hours) determination of serum calcium, determination of creatinine clearance, post-dose ECG assessments at selected visits and assessments of postural hypotension (60 minutes post-dose) at selected clinic visits.

Bone biopsy of the iliac crest will be performed in a subset of patients receiving BA058 at a dose of 80 μg and Placebo (up to 100 per group) for assessment of quantitative bone histomorphometry which is the quantative study of the microscopic organization and structure of the bone tissue, and will be read blinded to treatment by an independent blinded assessor. Renal safety will be further evaluated in a subset of 100 patients in each treatment group by renal computed tomography, or CT, scan.

Overall study safety will be monitored by an independent Data Safety Monitoring Board.

Table of Contents

BA058 Microneedle Patch Phase 2

We plan to conduct a Phase 2 randomized, placebo-controlled, parallel group dose-finding clinical trial in mid-2012. The study will evaluate the safety and efficacy of the daily BA058 Microneedle Patch in women with osteoporosis. We intend to enroll about 250 patients and the study will be similar in design to the Phase 2 study for BA058 Injection. The study will evaluate the effects of 3 doses of the BA058 Microneedle Patch, compared to placebo and BA058 Injection 80 µg on change in BMD and anabolic bone markers over 6 months of treatment. The study will be powered to detect clinically meaningful changes in BMD and biomarkers as efficacy measures.

Safety will be assessed as changes in incidence of adverse events, changes in laboratory parameters, in particular serum calcium, change from baseline in the patient's vital signs and physical examination.

Study participation will be preceded by 4 weeks of pretreatment with Calcium and Vitamin D supplements and treatment conclusion will be followed by a one month period of safety observation.

Completed BA058 Studies
BA058 Injection, Phase 2

A Phase 2 dose-finding clinical trial (Study BA058-05-002) was conducted as a randomized, placebo-controlled, parallel group dose-finding study in the United States, Argentina, India and the United Kingdom. The purpose of the study was to evaluate the safety and efficacy of daily injections of BA058 Injection in women with osteoporosis. Postmenopausal women between the ages of 55 to 85 inclusive who had a BMD T-score less than or equal to -2.5 at the lumbar spine or hip (femoral neck) by DXA or a BMD T-score of less than or equal to -2 and a prior low trauma fracture, or an additional risk factor were candidates for this study. The study evaluated the effects of BA058 Injection at multiple doses (0, 20, 40 and 80 µg) on recovery of BMD, a marker of fracture risk, and on biomarkers of anabolic and resorptive activity in bone. The study also included a Forteo® treatment arm for reference. These efficacy measures (BMD and bone biomarkers) were designed for statistical significance. After the initial 24 weeks of treatment, eligible patients were offered a second 24 weeks of their assigned treatment. Safety was assessed throughout the study and reported on at both 6 months and 12 months. BA058 Injection and BA058-placebo were self-administered using a prefilled cartridge in a pen-injector device. Forteo® was self-administered as the marketed product at the approved dose of 20 µg per day by SC injection. Four weeks prior to start of treatment, patients began taking Calcium and Vitamin D supplements that continued throughout the study.

A total of 270 patients (mean age: 65 years) entered the pretreatment period, 222 patients were randomized, and 221 patients received study treatment and were analyzed in the intent to-treat, or ITT, population with 55 continuing into an additional 24 weeks of treatment. A total of 155 patients were included in the Efficacy Population (Per Protocol) in the initial 24 weeks of treatment.

Initial 24 weeks of treatment

The efficacy results of Study BA058-05-002 confirm the preclinical and early clinical hypothesis that BA058 Injection induces a dose-dependent increase in BMD and in markers of bone remodeling measurable at both the 12-week and 24-week assessments.

At week 12, in the ITT population the mean percent change in total analyzable spine BMD increased with dose, Figure A. The mean gains in BMD (active treatment placebo) for the BA058 Injection 40 µg and 80 µg groups were statistically significant ($p = .0013$ and $p < 0.001$, respectively). The difference was not statistically significant in the BA058 20 µg group and just missed significance in the Forteo® group ($p = 0.055$).

Table of Contents

At week 24, the percent change from baseline continued to increase and was statistically significantly proportional to dose (p<0.001), see Figure A below. Again, the mean gain in total analyzable spine BMD was statistically significant for the BA058 Injection 40 µg (p = <0.001) and 80 µg (p < 0.001) groups. The BMD gain at week 24 was also significant for the Forteo® group (p < 0.001), but not for the BA058 Injection 20 µg group.

Figure A Mean Standard Error of the Mean (SEM) Percent Change from Baseline at weeks 12 and 24 in Total Analyzable Spine BMD

Table of Contents

An even greater proportional response in BMD was elicited in the hip region. By week 24, mean percent changes in total analyzable hip BMD were 0.4%, 1.4%, 2.0% and 2.6% for the placebo, BA058 at a dose of 20 µg, BA058 at a dose of 40 µg, and BA058 at a dose of 80 µg groups, respectively; mean percent change in the Forteo® (0.5%) group was similar to placebo, see Figure B below. Total hip showed a clear dose response to BA058 and a more than five-fold benefit of BA058 at a dose of 80 µg over Forteo®. A similar relative benefit of BA058 at a dose of 80 µg over Forteo® was seen in all regions of the hip.

Figure B Mean (SEM) Percent Change from Baseline at weeks 12 and 24 in Total Analyzable Hip BMD (ITT Population, N=221)

BA058 Injection also induced a dose-dependent rise in major markers of bone anabolic activity studied (N-terminal propeptide of type I procollagen PINP, bone specific alkaline phosphatase BSAP, and osteocalcin). The response to Forteo® was generally somewhat greater for all anabolic markers but also bone resorption markers (C-telopeptides of type I collagen crosslinks, or CTX, and N-telopeptides of type I collagen crosslinks, or NTX), consistent with published data on later gradual loss of Forteo® BMD benefit.

BA058 Injection was well tolerated at all doses and safety events were consistent with usual medical events in a study population of this age and gender. The safety profile was also similar to that of Forteo® and there were no treatment-related significant (serious) adverse events, or SAEs however, adverse events were reported by 74% of patients in the first 6 months of treatment, with a similar incidence across all treatment groups. The majority of on-treatment events were mild to moderate in severity and there were no deaths reported. Seven subjects discontinued due to adverse events,1in the BA058 20 µg group, 1 in the BA058 40 µg group, 3 in the BA058 80 µg group and 2 in the teriparatide group Eight patients (4%) experienced at least 1 severe adverse event and the incidence of such events was similar across treatment groups. Five SAEs, unrelated to treatment, were reported in 3 patients. Local tolerance at the injection site was similar across treatment groups and fewer than 20% of subjects reported any symptoms, such as redness, at the injection site across the many months of injections.

Table of Contents

The level of calcium in the blood, known as serum calcium levels, were monitored throughout the study and clinically significant elevated levels (≥10.5 milligrams per deciliter, or mg/dL) were observed in 40% of the Forteo® group while also observed in 4%, 12%, 19% and 18% of the placebo, BA058 Injection at a dose of 20 µg, 40 µg and 80 µg groups, respectively. Most elevations were noted at the 4-hour post-injection time point.

Blood pressure was assessed throughout the study for postural change. Postural changes in blood pressure (predetermined level of change in systolic or diastolic from lying to standing) were reported in 7 patients, including 0%, 5%, 2%, 2% and 7% of patients in the placebo, BA058 Injection 20 µg, 40 µg, 80 µg and Forteo® groups, respectively. Pre-dose postural changes in blood pressure were similar across treatment groups. There were no clinically meaningful differences in ECG parameters between the placebo and active treatment groups.

Seventeen patients had low titer antibodies against BA058 after 6 months of treatment. Of these, 1 was in the placebo group, 2 were in the BA058 20 µg group, 8 were in the BA058 40 µg group and 6 were in the BA058 80 µg group. There were no associated safety events and no attenuation of treatment efficacy. One antibody-positive patient in the BA058 Injection 40 µg group was found to have evidence of neutralizing activity at 24 weeks without evidence of attenuation of drug efficacy, having a 9.3% gain in total analyzable spine BMD at the week 24 assessment.

Extended 24 weeks of treatment

Patients who completed the initial 24 weeks of treatment and continued to meet eligibility criteria were offered participation in the 24-week extension study in which they would continue their assigned treatment. On completion of the regulatory process to approve the study extension, 69 patients remained eligible and 55 participated, including 13, 10, 7, 11 and 14 patients in the BA058 Injection 20 µg, 40 µg, 80 µg, placebo and Forteo® groups, respectively. Forty-eight patients completed the extended treatment period.

BMD continued to increase during the extended 24 weeks of treatment, with the largest percent increases in total analyzable spine BMD, femoral neck BMD and total analyzable hip BMD observed in the BA058 Injection 80 µg group. By week 48, mean percent changes in spine BMD were 0.7%, 5.1%, 9.8% and 12.9% for the placebo, BA058 20 µg, BA058 40 µg and BA058 80 µg, groups, respectively, while mean percent change from baseline in the Forteo® group was 8.6%. At week 48, the mean femoral neck BMD in the BA058 Injection 80 µg group gained 4.1% compared to the mean of the Forteo® group at 2.2%. The respective results for total analyzable hip BMD were 0.7%, 2.2%, 2.1% and 2.7% for the placebo, BA058 20 µg, BA058 40 µg and BA058 80 µg groups, respectively; compared to 1.3% for the Forteo® group.

No treatment-related SAEs or deaths were reported during this time period. Two patients discontinued treatment, one for bilateral femoral hernias (BA058 Injection 80 µg) and one for moderate syncope (BA058 Injection 40 µg). TEAEs occurred in a similar proportion of patients in each treatment group across the 52-week study period and the majority of events were mild or moderate in severity. The profile of events was not different in the second 6 months of study treatment.

Local tolerance of study drug injections was also similar in the second 6 months of treatment. There were no safety signals observed in the evaluation of clinical laboratory parameters.

Conclusions

In conclusion, this study demonstrated that treatment with BA058 Injection induces a substantial positive change in BMD at both spine and hip in women with osteoporosis, with a particular advantage over Forteo® at the hip, and achieves this benefit safely and with substantially less hypercalcemia effect than Forteo®.

Table of Contents

BA058 Injection Phase 1 Trials

The First Phase 1 Trial

The first Phase 1 clinical trial was a single-dose study conducted as a randomized, double-blind, placebo-controlled, parallel-group dose escalation study of BA058 Injection in a vial formulation administered as a single SC dose to healthy male and female subjects with a mean age of 61 years. The study administered single SC doses of 2, 5, 7.5, 10, 15, 20, 40, 60, 80, and 100 µg BA058 Injection or placebo. Sixteen subjects also received 2.5 µg of BA058 Injection by the intravenous, or IV, route and 15 µg subcutaneously in separate study periods. In total, 76 subjects received BA058 while 20 received a placebo. No elevation in serum calcium was observed at doses of 80 µg or lower and no clinically relevant effects of BA058 Injection on ECG or continuous monitoring through the use of a Holter monitor, readings were observed. In summary, this study demonstrated that BA058 Injection is 100% bioavailable when administered by the SC route. BA058 Injection did not induce hypercalcemia and was well tolerated at doses up to 80 µg subcutaneously.

The Second Phase 1 Trial

The second Phase 1 clinical trial administered BA058 Injection once daily for seven days. There were 39 study subjects, all healthy postmenopausal women with an average age of 60. Four doses of BA058 Injection (5, 20, 40 or 80 µg) and a matching placebo were studied, with 7 or 8 women receiving each dose for the 7 days of the study. BA058 Injection was well tolerated at all doses and there were no medically important adverse events. All other adverse events were mild or moderate in intensity and did not appear to be related to the dose of study drug. No subjects dropped out or discontinued the study.

BA058 was rapidly absorbed following injection and reached peak blood levels within 1 hour. The drug was rapidly cleared from the circulation, resulting in half-life values ranging from 1.05 to 2.59 hours. Following BA058 administration, serum parathyroid hormone decreased, as would be expected, and serum 1,25-dihydroxyvitamin D and serum P1NP rose in an dose-related manner. 1,25-dihydroxyvitamin D is an activated form of Vitamin D and PINP is a bone protein that is increased when new bone is being formed; both are expected and beneficial effects of the study drug and its class. Serum calcium showed a slight rise following BA058 administration, also an expected effect, but remained within the normal range at all times in all patients other than isolated minor and transient elevations in 2 of 7 placebo and 3 of 32 BA058 subjects.

The Third Phase 1 Trial

The third Phase 1 clinical trial was a multi-dose study, with the same design as the Second Phase 1 Trial, but using a liquid prefilled multidose cartridge of BA058 and conducted at doses of 80, 100 and 120 µg. BA058 Injection or placebo was administered daily as a SC dose for 7 days to healthy postmenopausal women. Thirty healthy postmenopausal women with a mean age of 61 years were enrolled and 29 completed treatment.

BA058 Injection was well tolerated at doses of up to 100 µg but not at 120 µg which met criteria for termination of dose escalation. One patient in the 120 µg group was intolerant of study drug and was discontinued. All adverse events were mild or moderate in intensity. No study subject developed serum antibodies to BA058 following the 7 days of exposure. BA058 pharmacokinetics was again characterized by rapid absorption, reaching mean peak plasma concentration within approximately 0.5 hours; mean half-life values ranged from 1.13 to 1.65 hours. Similar responses in serum PTH, 1,25-dihydroxy Vitamin D and serum P1NP were observed. These higher doses of BA058 Injection were not associated with occurrence of hypercalcemia. In summary, BA058 Injection was well tolerated at up to 100 µg once daily for 7 days.

Table of Contents

BA058 Microneedle Patch

First Phase 1 Trial

The objectives of the Microneedle Patch Phase 1 study were to determine the safety, pharmacokinetics, or PK and time course of delivery of BA058 Microneedle Patch in healthy postmenopausal women and to compare the PK profiles of BA058 Microneedle Patch delivered transdermally to BA058 Injection administered subcutaneously.

This study was a randomized, double-blind, placebo-controlled, ascending single-dose study and enrolled 38 healthy postmenopausal women with a mean age of 57.6. Subjects underwent up to 3 single dose exposures to BA058 Microneedle Patch, Placebo Microneedle Patch or BA058 Injection 80 µg over the course of 3 Study Periods.

Pharmacokinetic Results

BA058 Microneedle Patch was characterized by a rapid absorption and elimination. The Cmax and half-life times were shorter than for BA058 Injection administration.

Safety Results

The BA058 Microneedle Patch was well tolerated. Safety events were similar between the BA058 Microneedle Patch and BA058 Injection, with the majority of adverse events being mild (99%) and, of these, most were reactions at the application site. There was no clinically notable difference in laboratory or cardiac safety parameters across doses of BA058 or routes of administration.

In conclusion, the first Phase 1 study of the BA058 Microneedle Patch demonstrated that BA058 can safely be delivered by this route of administration.

Second Phase 1 Trial

A second Phase 1 single day and 7-day application study of the BA058 Microneedle Patch is currently being conducted in the United States using an optimized Microneedle Patch system. The study is designed as a safety, dose-ranging and time-course pharmacokinetic and pharmacodynamic study. This Phase 1 study will investigate optimal dose, wear time and application site for transdermal delivery of BA058 using an optimized microneedle array.

The study will use a matrix design and will first establish optimal wear time before exploring the impact of application site in the range of doses chosen for evaluation. The results obtained using the BA058 Microneedle Patch will be referenced to those of BA058 Injection at a dose of 80 µg.

Preclinical Pharmacology of BA058

In pharmacology studies conducted with BA058, the following has been shown:

BA058 is a potent selective agonist of the human PTHR 1 receptor;

In models of calcium mobilization, BA058 has significantly less calcium mobilizing activity at higher doses than the native hPTHrP(1-34), and less activity than hPTH(1-34);

BA058 Injection stimulates the formation of normal, well-organized bone and restores BMD in ovariectomized, osteopenic rats and primates. Additionally, mechanical testing of bones from ovariectomized rats after treatment with BA058 revealed a significant increase in femur and vertebral bone strength. BA058 exhibited the majority of its effects through the growth of trabecular bone without compromising cortical bone. Similar studies in rats with BA058 Microneedle Patch show comparable restoration of bone;

Table of Contents

BA058 Injection was well tolerated over a wide range of doses in two species, rats and primates, for up to 6 months and 9 months, respectively;

Safety pharmacology studies demonstrated no respiratory, gastroenterologic, hematologic, renal or CNS effects. Tachycardia and hypotension were observed in dogs following both intravenous and subcutaneous administration, however such effects were not observed in other species;

The No Observed Adverse Effect Level was 15, 25 and 25 μg/kg/day in rats in the 4-, 13 and 26-week studies, respectively, and 100, 50 and < 10 μg/kg/day in monkeys in the 4-, 13- and 39-week studies;

Repeat SC dose studies in both rats and cynomolgus monkeys at doses up to 300 and 450 μg/kg/day, respectively, revealed a relatively fast absorption (Tmax from 0.083 to 1.0 hr); peak serum concentration and Area under the Curve, a measure of drug exposure, increased as the dose increased.

These preclinical studies suggest that compared to hPTH(1-34), BA058 Injection can potentially be used to restore lost BMD with a reduced risk of hypercalcemia and loss of cortical bone.

Planned and Active Preclinical Safety Studies for BA058

A two-year subcutaneous injection carcinogenicity study of BA058 in Fischer 344 albino rats is currently on-going and will assess the carcinogenic potential of BA058. The study is being conducted according to the provisions set forth in Guidance ICH-S1A, ICH-S1B, and ICH-S1C(R2), and the design was accepted by FDA on 15 July 2009. This study will evaluate 3 BA058 dose levels, and the doses were selected based upon findings and tolerance in completed long-term rat toxicology studies and the anticipated tolerance over a 2-year dosing period and, furthermore, represents a good exposure multiple over maximum clinical doses. An active comparator arm is also included; a cohort of rats will be dosed with hPTH (1-34), because it is anticipated that osteosarcoma will be observed over time. The active comparator will allow confirmation of the sensitivity of the model. This study will be conducted in parallel to the Phase 3 clinical program.

Two preclinical bone quality studies will also be conducted, one in female rats who have had their ovaries removed, referred to as ovariectomized, or OVX, rats for up to 12 months of daily BA058 subcutaneous injection, the second study in adult OVX monkeys for up to 18 months. The primary objective of these studies is to demonstrate that long-term treatment with BA058 Injection will not lead to deleterious effects on bone quality by determining BA058's effect on the mass, architecture and strength of bones. These studies will be conducted in parallel to the Phase 3 clinical program and, in both studies, BA058 will be compared to placebo. The 12-month rat study is being performed in OVX skeletally mature Sprague-Dawley rats, an appropriate species for osteoporosis studies as a result of the cancellous bone changes and bone strength changes similarly noted in humans. In this study, a 13-week bone depletion period will occur after ovariectomy/sham surgery and prior to initiation of daily SC injection dosing with vehicle or three different dose levels of BA058.

The 16-month nonhuman primate study is being performed in OVX monkeys, a larger remodeling species whose bone depletion can be induced by estrogen deficiency, as in human menopause. In this study, an approximate 9-month bone depletion period will occur after OVX/sham surgery and prior to initiation of daily SC injection dosing with vehicle or three dose levels of BA058. The specific objectives and measured outcomes of both studies are to investigate the potential safety and efficacy of BA058 on prevention of bone loss. Retention of bone mass, both cortical bone dominant in long bones, and cancellous bone dominant in spinal bone, will be assess by BMD. Preservation of cortical and cancellous bone on strength will be determined by biomechanical testing. The mechanisms by which BA058 affects bone will be assessed by evaluation of biomarkers of bone turnover and

Table of Contents

histomorphometric indices of bone turnover. Pharmacokinetics of BA058 and development of antidrug antibodies will also be evaluated.

Manufacturing of BA058

BA058 API is manufactured on a contract basis by Lonza, under Good Manufacturing Practices conditions using a solid phase peptide synthesis assembly process, and purification by high pressure liquid chromatography. BA058 Injection is supplied as a liquid in a multi-dose cartridge for use in a pen delivery device. The multi-dose cartridges are manufactured by Vetter. The BA058 Microneedle Patch is manufactured by 3M based on their patented microneedle technology to administer drugs through the skin, as an alternative to subcutaneous injection.

Patents relating to BA058

Composition of matter of BA058 is claimed in issued patents in the United States (US 5,969,095), Europe, Australia, Canada, China, Hong Kong, Israel, South Korea, New Zealand, Poland, Russia, Singapore and Taiwan. These cases have a normal patent expiration date of 2016 absent the possibility of patent term extension. The phase 3 clinical dosage of BA058 by the subcutaneous route for use in treating osteoporosis is covered by US 7,803,770 until 2027 in the United States (absent extensions) and a related case is currently pending in Europe, China, Australia, Canada, Japan, Brazil, Mexico, Singapore, South Korea, India, Israel, New Zealand, Norway, Russia and Ukraine. A priority patent application covering various aspects of the BA058 for microneedle patch application has been filed in 2011 in the United States (US app. # 61/478,466). Any claims that might issue from app. # 61/478,466 will have a normal expiry date no earlier than 2031.

Competition for BA058

The development and commercialization of new products to treat osteoporosis and women's health is highly competitive, and there will be considerable competition from major pharmaceutical, biotechnology and specialty pharmaceutical companies. Many of our competitors have substantially more resources than we do, including both financial and technical. In addition, many of these companies have longer operating histories and more experience than us in preclinical and clinical development, manufacturing, regulatory, and global commercialization. ***See, "Risk Factors If we cannot compete successfully for market share against other drug companies, we may not achieve sufficient product revenues and our business will suffer" above.*** Competition for highly qualified employees is intense.

Potential competitors with BA058 include, but are not limited to, Amgen, Merck & Co., Novartis, Lilly and Zosano. Lilly launched Forteo® in December 2002 as the first-to-market anabolic or bone-building agent for the treatment of osteoporosis. Lilly has also announced that it is investigating a transdermal method of delivery of Forteo®. Zosano is also developing a transdermal form of rhPTH(1-34) that would compete with the BA058 Microneedle Patch. We have no products approved for sale and therefore have no share of any therapeutic markets in which we hope to introduce BA058.

Clinical Development Program for RAD1901

In June 2006, we exclusively licensed the worldwide rights (except Japan) to RAD1901 from Eisai. RAD1901 is a selective estrogen receptor modulator, or SERM, being developed by us in an oral formulation as a treatment for vasomotor symptoms commonly known as hot flashes.

Background on Vasomotor Symptoms

Hot flashes and night sweats are a common symptom during menopause, with up to 85% of women experiencing them during the menopause transition, for a median duration of four years. In 2008, more than 11.5 million women in the United States were in the 45 to 49 age range to enter

Table of Contents

menopause. In addition, most women receiving systemic therapy for breast cancer suffer hot flashes, often with more severe or prolonged symptoms than women experiencing menopause. These symptoms can disrupt sleep and interfere with quality of life. An estimated two million women undergo menopause every year in the U.S., with a total population of 50 million postmenopausal women.

Historically, hormone replacement therapy, or HRT, with estrogen and/or progesterone was considered the most efficacious approach to relieving menopausal symptoms such as hot flashes. However, data from the Women's Health Initiative, or WHI, identified increased risks for malignancy and cardiovascular disease associated with estrogen therapy. Sales of HRT declined substantially after the release of the initial WHI data but HRT remains the current standard of care for many women suffering from hot flashes; however, due to concerns about the potential long-term risks and contraindications associated with HRT, we believe that there is a significant need for new therapeutic options to treat vasomotor symptoms. Pfizer's Premarin family remains the market leader for drugs to manage menopausal symptoms with 2010 worldwide sales of $1 billion.

Pharmacologic Characteristics of RAD1901

RAD1901 has been shown to bind to the estrogen receptor alpha, or ERα, and to have both estrogen-like and estrogen antagonist effects in different tissues. RAD1901 has also been shown to have both estrogen-like behavioral effects in animals and to reduce vasomotor signs in an animal model of menopausal hot flashes. In bone, RAD1901 protects against castration-induced bone loss while showing no unwanted stimulation of the endometrium. In cell culture, RAD1901 does not stimulate replication of breast cancer cells and antagonizes the stimulating effects of estrogen. Overall, therefore, RAD1901 exhibits a number of properties that would make it a suitable drug candidate for the management of menopausal symptoms, in particular the treatment of vasomotor symptoms.

Phase 1

A Phase 1 safety, pharmacokinetic and bioavailability study was conducted in 80 healthy postmenopausal women over a range of doses of RAD1901, including placebo. After single dosing with RAD1901 by mouth, the mean half-life ranged between 27.4 and 32.5 h. Bioavailability was determined to be approximately 10%. Food effect was also investigated and the presence of food was determined to increase absorption and delay clearance of RAD1901.

RAD1901 was generally well tolerated. All TEAEs were of mild intensity, with some increase in frequency at the higher doses in the multiple dose group, most commonly gastrointestinal symptoms and headache. There were no serious adverse events observed.

Phase 2

A Phase 2 proof of concept study was conducted in 100 healthy postmenopausal women using 4 doses of RAD1901 (10, 25, 50 and 100 mg) and placebo. The primary study outcome was reduction in the frequency and severity of moderate and severe hot flashes. While a classic dose-response effect was not demonstrated, efficacy was determined to occur at the 10 mg dose level which achieved a statistically significant reduction in the frequency of moderate and severe hot flashes both by linear trend test and by comparison to placebo and in overall (mild-moderate-severe) hot flashes at either the 2-, 3- or 4-week time-points. A similar reduction in composite score (frequency × severity) was identified at all time-points, with a statistically significant difference from placebo achieved at the 2-, 3- or 4-week time-points. Numerical reductions in mean severity and mean daily severity were observed, but did not reach statistical significance.

No serious adverse events were reported during the course of the study. Overall, 69% of patients had an adverse event, generally mild or moderate in severity, with some evidence of dose dependency, and events were most commonly gastrointestinal symptoms and headache. Three severe adverse events

Table of Contents

occurred, one in a placebo patient, and were not considered treatment related. Two patients discontinued treatment due to an adverse event, neither in relation to the 10 mg dose.

As discussed elsewhere in this prospectus, the FDA approval process is lengthy and expensive. Our current strategy is to collaborate with third parties for the further development and commercialization of RAD1901 so the date of FDA approved of RAD1901 cannot be predicted at this time. As a result of the uncertainties around the completion of a partnership arrangement for RAD1901 with third parties, we are unable to determine the duration and costs to complete current or future clinical stages of our RAD1901 product candidate or when, or to what extent, we will generate revenues from the commercialization and sale of RAD 1901. From January 1, 2009 through June 30, 2011, we have incurred $4.9 million in research and development costs related to RAD1901. Any failure by us to obtain, or any delay in obtaining, regulatory approvals for RAD1901 could significantly increase our need to raise additional working capital funds and materially adversely affect our product development efforts and our business overall. We can give no assurances that any additional capital that we are able to obtain will be sufficient to meet our needs. If we do not succeed in timely raising additional funds on acceptable terms, we may be unable to complete planned pre-clinical and clinical trials or obtain approval of any product candidates, including RAD1901 from the FDA and other regulatory authorities. In addition, we could be forced to discontinue product development, reduce or forego sales and marketing efforts and forego attractive business opportunities. Any additional sources of financing will likely involve the issuance of additional equity securities, which will have a dilutive effect on stockholders.

Manufacturing of RAD1901

RAD1901 API is manufactured for Radius on a contract basis by Irix Pharmaceuticals, Inc. The present GMP manufacture of RAD1901 comprises 9 synthetic steps from a non-GMP starting material. The current process of manufacture requires no chromatographic separations. RAD1901 is a chiral material present as essentially one enantiomer.

Patents related to RAD1901

RAD1901 as a composition of matter is covered by US patent 7,612,114 (normal expiry 2026 absent Hatch-Waxman extensions). A corresponding case has also been issued in Australia with related cases pending in Canada, India and Europe. A patent application covering methods of using RAD1901 for the treatment of hot flush has been filed in the US (published as US 2010/0105733A1), Europe and Canada and any claims issuing will have a normal expiry of 2027. In addition, a provisional dosage form application has been filed in the United States (US app# 61/334,095) and any claims that might issue from applications claiming priority to US app# 61/334,095 will have a normal expiry date no earlier than 2031.

Competition for RAD1901

The development and commercialization of new products to treat women's health is highly competitive, and there will be considerable competition from major pharmaceutical, biotechnology and specialty pharmaceutical companies. Many of our competitors have substantially more resources than we do, including both financial and technical. In addition, many of these companies have longer operating histories and more experience than us in preclinical and clinical development, manufacturing, regulatory and global commercialization. See, "Risk Factors If we cannot compete successfully for market share against other drug companies, we may not achieve sufficient product revenues and our business may suffer" above.

Potential competitors to Radius in relation to RAD1901 include, but are not limited to, Pfizer (NDA under review) and Depomed (Phase 3) who both have agents in more advanced stages of

Table of Contents

development than RAD1901. We believe that RAD1901 will be able to compete with other agents for the treatment of hot flashes because we expect it to have a similar efficacy and better safety profile than estrogen products, as well as a better efficacy and safety profile than non-estrogen products. We have no products approved for sale and therefore have no share of any therapeutic markets in which we hope to introduce RAD1901.

RAD140

Pharmacologic Characteristics of RAD140

RAD140 is a nonsteroidal, selective androgen receptor modulator that resulted from an internal drug discovery program that began in 2005. RAD140 has demonstrated potent anabolic activity on muscle and bone in preclinical studies and has completed 28-day preclinical toxicology studies in both rats and monkeys. Because of its high anabolic efficacy, receptor selectivity, potent oral activity and long duration half life, it is believed that RAD140 has clinical potential in a number of indications where the increase in lean muscle mass and/or bone density is beneficial such as treating the weight loss due to cancer cachexia, muscle frailty and osteoporosis.

As discussed elsewhere in this prospectus, the FDA approval process is lengthy and expensive. Our current strategy is to collaborate with third parties for the further development and commercialization of RAD140 so the date of FDA approval of RAD140 cannot be predicted at this time. As a result of the uncertainties around the completion of a partnership arrangement for RAD140 with third parties, we are unable to determine the duration and costs to complete current or future clinical stages of our RAD140 product candidate or when, or to what extent, we will generate revenues from the commercialization and sale of RAD140. From January 1, 2009 through June 30, 2011, we have incurred $2.6 million in research and development costs related to RAD140. Any failure by us to obtain, or any delay in obtaining, regulatory approvals for RAD140 could significantly increase our need to raise additional working capital funds and materially adversely affect our product development efforts and our business overall. We can give no assurances that any additional capital that we are able to obtain will be sufficient to meet our needs. If we do not succeed in timely raising additional funds on acceptable terms, we may be unable to complete planned pre-clinical and clinical trials or obtain approval of any product candidates, including RAD140 from the FDA and other regulatory authorities. In addition, we could be forced to discontinue product development, reduce or forego sales and marketing efforts and forego attractive business opportunities. Any additional sources of financing will likely involve the issuance of additional equity securities, which will have a dilutive effect on stockholders.

Patents related to RAD140

RAD140 as a composition of matter and methods of using RAD140 is covered by pending patent applications in the US (e.g. US app#12/378,812)) and numerous additional countries worldwide. Any patents issued from these filings will have a normal expiry of 2029 absent any extensions.

Competition for RAD140

The development and commercialization of new products to treat women's health is highly competitive, and there will be considerable competition from major pharmaceutical, biotechnology and specialty pharmaceutical companies. Many of our competitors have substantially more resources than we do, including both financial and technical. In addition, many of these companies have longer operating histories and more experience than us in preclinical and clinical development, manufacturing, regulatory and global commercialization. See, "Risk Factors If we cannot compete successfully for market share against other drug companies, we may not achieve sufficient product revenues and our business may suffer" above.

Table of Contents

Potential competitors to Radius in relation to RAD140 include, but are not limited to, GTx (Phase 3) and Ligand (Phase 1/2) who both have agents in more advanced stages of development than RAD140. We believe that RAD140 will be able to compete with other SARM agents because we expect it to have high potency to increase muscle and bone with a strong safety profile. We have no products approved for sale and therefore have no share of any therapeutic markets in which we hope to introduce RAD140.

Collaborations and License Agreements

Nordic Bioscience

We entered into a Letter of Intent with Nordic on September 3, 2010, pursuant to which we funded preparatory work by Nordic in respect of a Phase 3 clinical study of BA058 Injection. The Letter of Intent was extended on December 15, 2010 and on January 31, 2011. Pursuant to the Letter of Intent and the two extensions, we funded an aggregate $1,500,000 of preparatory work by Nordic during 2010 and funded and additional $750,000 of preparatory work by Nordic during 2011. On March 29, 2011, we entered into a Clinical Trial Services Agreement (which superseded and subsumed the Letter of Intent and its two extensions), a Work Statement NB-1 under such Clinical Trial Services Agreement and a related Stock Issuance Agreement with Nordic. Pursuant to Work Statement NB-1, Nordic is managing the Phase 3 clinical study of BA058 Injection and the Company is required to make various payments denominated in both euros and U.S dollars over the course of the Phase 3 study of total €33.9 million and $4.9 million. Pursuant to the Stock Issuance Agreement, Nordic agreed to purchase the equivalent of €371,864 of our Series A-5 Convertible Preferred Stock at a price per share equal to $8.142. Nordic purchased 64,430 shares of Series A-5 Convertible Preferred Stock on May 17, 2011 for proceeds of $525,154 to the Company. The Stock Issuance Agreement provides that Nordic will receive additional shares of equity, having an aggregate value of up to €36.8 million, which shall initially be in the form of shares of Series A-6 Convertible Preferred Stock, at certain times during the performance of the Phase 3 clinical study that is the subject of Work Statement NB-1.

The Clinical Trial Services Agreement has a 5-year term unless it is sooner terminated. The Clinical Trial Services Agreement or any Work Statement may be terminated by mutual agreement of the parties at any time. Either party may also terminate any Work Statement upon a material breach by the other party with respect to such Work Statement unless such other party cures the alleged breach within the notice period specified in the Clinical Trial Services Agreement or if not capable of being cured within such period the party alleged to be in breach commences efforts to cure and makes diligently proceeds to cure. Termination of any Work Statement does not result in termination of the Clinical Services Agreement or any other Work Statements, which remain in force until terminated. Either party may also terminate a Work Statement if force majeure conditions have prevented performance by the other party for more than a specified period of time. We may also terminate a Work Statement with notice to Nordic if authorization and approval to perform any clinical study that is the subject of such Work Statement is withdrawn by the FDA or other relevant health authorities or human or toxicological test results support termination of the clinical study relating to such Work Statement for reasons of safety or if the emergence of any adverse event or side effect in the clinical study relating to such Work Statement is of such magnitude or incidence in our opinion as to support termination. The Clinical Trial Services Agreement contains customary risk allocation clauses with each party indemnifying the other in respect of third party claims arising out of or resulting from: (i) the negligence or intentional misconduct of such party, its employees, agents or representatives in performing its obligations under the Clinical Services Agreement or any Work Statement; and (ii) any breach by such party of its representations and warranties under the Clinical Trial Services Agreement. We have agreed to indemnify Nordic in respect of third party claims for product liability or personal injury arising from or relating to our products or our use of any deliverables. In addition, we separately provide indemnification to the investigative sites performing services pursuant to Work Statement NB-1

Table of Contents

in respect of third party claims of injury, illness or adverse side effects to a patient in the study that is the subject of Work Statement NB-1 that are attributable to the Radius study drug under indemnification letters with such investigative sites. The Clinical Services Agreement contains other customary clauses and terms as are common in similar agreements in the industry.

3M

In December 2008, we entered into a Feasibility Agreement with 3M whereby 3M assessed the feasibility of developing a BA058 microneedle patch product and supplying the product for preclinical studies in an animal model. Upon completion of the feasibility study, during June 2009, we entered into a Development and Clinical Supplies Agreement with 3M under which 3M is responsible to develop a BA058 microneedle patch product and manufacture clinical and toxicology supplies of such patch product for preclinical, Phase 1 and Phase 2 studies on an exclusive basis. We pay 3M for services delivered pursuant to the Development and Clinical Supplies Agreement on a fee for service or a fee for deliverable basis as specified in the Development and Clinical Supplies Agreement. The Feasibility Agreement expired on or around September 2009. We have paid 3M approximately $4,003,000 in respect of services and deliverables delivered pursuant to the Feasibility Agreement and the Development and Clinical Supplies Agreement.

The Development and Clinical Supplies Agreement remains in effect until the completion of the workplan that the parties are performing thereunder, unless it is sooner terminated. Either party may terminate the Development and Clinical Supplies Agreement upon a material breach by the other party unless such other party cures the alleged breach within the notice period specified in the Development and Clinical Supplies Agreement. We are permitted to terminate the Development and Clinical Supplies Agreement without cause by delivering notice to 3M a specified period before the termination date. We are also permitted to terminate within a specified period of time following a specified date with notice to 3M in the event that we have determined that the Phase 1 clinical study for the BA058 microneedle patch product needs to be repeated or that additional clinical data is required with respect thereto in order to initiate the Phase 2 clinical study for the BA058 microneedle patch product. The Development and Clinical Supplies Agreement contains customary risk allocation clauses with 3M indemnifying us in respect of third party claims arising from any personal injury to the extent that such claim results from 3M's breach of warranty with respect to the BA058 Microneedle Patch meeting applicable specifications; and us indemnifying 3M in respect of third party claims arising with from our or our agent's use, testing or clinical studies of the BA058 Microneedle Patch. The Development and Clinical Supplies Agreement contains other customary clauses and terms as are common in similar agreements in the industry.

Ipsen Pharma

In September 2005, we entered into a License Agreement with Ipsen under which we exclusively licensed certain Ipsen compound technology and related patents covering BA058 to research, develop, manufacture and commercialize certain compounds and related products in all countries, except Japan (where we do not hold commercialization rights) and France (where our commercialization rights are subject to certain co-marketing and co-promotion rights retained by Ipsen). Ipsen also granted us an exclusive right and license under the Ipsen compound technology and related patents to make and have made compounds or product in Japan. Ipsen also granted us an exclusive right and license under certain Ipsen formulation technology and related patents solely for purposes of enabling us to develop, manufacture and commercialize compounds and products covered by the compound technology license in all countries, except Japan (where we do not hold commercialization rights) and France (where our commercialization rights are subject to certain co-marketing and co-promotion rights retained by Ipsen). With respect to France, if Ipsen exercises its co-marketing and co-promotion rights then Ipsen may elect to receive a percentage of the aggregate revenue from the sale of products by both parties in

Table of Contents

France (subject to a cap) and Ipsen shall bear a corresponding percentage of the costs and expenses incurred by both parties with respect to such marketing and promotion efforts in France; Ipsen shall also pay Radius a royalty on Ipsen's allocable portion of aggregate revenue from the sale of products by both parties in France. Specifically, we licensed US Patent No. 5,969,095, effective filing date (3/29/1996) entitled "Analogs of Parathyroid Hormone", US Patent No. 6,544,949, effective filing date (3/29/1996) entitled "Analogs of Parathyroid Hormone" and the corresponding foreign patents and continuing patent applications. In addition, we have rights to joint intellectual property including rights to US7803770, effective filing date (10/3/2007) and related patent applications both in the United States and worldwide (excluding Japan) that cover the method of treating osteoporosis using the phase 3 clinical dosage strength and form. As consideration for the rights to BA058 licensed to it by Ipsen, we paid Ipsen a non-refundable, non-creditable initial license fee of $250,000. The license agreement requires us to make payments to Ipsen upon the achievement of certain development, regulatory and commercial milestones in the range of €10,000,000 to €40,000,000, and we have at this time paid $750,000 in milestone payments and issued 17,326 shares of Series A-1 convertible preferred stock to Ipsen on May 17, 2011 in lieu of a €1,000,000 cash payment due to Ipsen upon initiation of the first BA058 Phase 3 clinical study. If we commercialize a product that includes the compound licensed from Ipsen or any analog thereof, we will be obligated to pay to Ipsen fixed mid-single digit royalties based on net sales of the product on a country-by-country basis until the later of the last to expire of the licensed patents or for a period of 10 years after the first commercial sale in such country. In the event that we sublicense the rights licensed from Ipsen to a third party, the Company is obligated to pay Ipsen a percentage of certain payments received from such sublicensee (in lieu of milestone payments not achieved at the time of such sublicense). The license agreement expires on a country by country basis on the later of (i) date the last remaining valid claim in the licensed patents expires, in that country; or (ii) a period of 10 years after the first commercial sale of the licensed products in such country unless it is sooner terminated. The license agreement may be terminated by us with prior notice to Ipsen at any time after the final study report Phase Ib has been delivered to Ipsen. The license agreement may be terminated by Ipsen upon notice to us with immediate effect, if Radius in any country of the world brings an action or proceeding seeking to have any Ipsen patent right declared invalid or unenforceable. The license agreement can also be terminated by Ipsen if we fail to use reasonable commercial efforts to develop the licensed product for sale and commercialization in those countries within the territory where it is commercially reasonable to do so as contemplated by the license agreement, or fails to use reasonable commercial efforts to perform its obligations under the latest revised version of the development plan approved by the joint steering commitee, or fails to use reasonable commercial efforts to launch and sell one licensed product in those countries within the territory where it is commercially reasonable to do so. Either party may also terminate the license agreement upon a material breach by the other party unless such other party cures the alleged breach within the notice period specified in the license agreement. Ipsen may terminate the license agreement in the event that the license agreement is assigned or sublicensed or in the event that a third party acquires us or in the event that we acquire control over a PTH or a PTHrP compound that is in clinical development or is commercially available in the territory and that, following such assignment, sublicense, acquisition, or acquisition of control by us, such assignee, sublicensee, acquirer or we fail to meet the timetable under the latest revised version of the development plan approved by the joint steering committee under the license agreement. Any failure to meet such timetable for purposes of such termination clause is deemed a material breach by us. The license agreement contains customary risk allocation clauses with each party indemnifying the other in respect of third party claims arising out of or resulting from: (i) the gross negligence or willful misconduct of such party, its affiliates, licensees, distributors or contractors; (ii) any breach by such party of its representations and warranties or any other provision of the license agreement or any related agreement; (iii) the manufacture on behalf of such party of any licensed product or compound; and (iv) (in the case of Ipsen) the use, development, handling or commercialization of any licensed compound, licensed product or the Ipsen formulation technology by or on behalf of Ipsen or any of its affiliates, licensees, distributors or contractors; and

Table of Contents

(v) (in the case of radius) the making, use, development, handling or commercialization of any licensed compound or any licensed product by or on our behalf or any of our affiliates, licensees or contractors. The license agreement contains other customary clauses and terms as are common in similar agreements in the industry. The license agreement was amended on September 12, 2007 and May 11, 2011.

In January 2006, we entered into a Pharmaceutical Development Agreement as contemplated by the License Agreement with Ipsen. The Pharmaceutical Development Agreement provides for the supply of quantities of licensed product for use in certain clinical trials. Beaufour Ipsen Industrie SAS, a subsidiary of Ipsen, is responsible for the supply of BA058 Injection in liquid form in a multi-dose cartridge for use in a pen delivery device. The multi-dose cartridges are manufactured for Beaufour Ipsen Industrie SAS by Vetter under a separate agreement between those parties, and the BA058 API is manufactured by Lonza for Radius and is delivered to Vetter for vialing in the multi-dose cartridges. The Pharmaceutical Development Agreement expires upon the completion of the work plan entered into under the Pharmaceutical Development Agreement unless it is sooner terminated. The Pharmaceutical Development Agreement shall automatically terminate upon termination of the Ipsen license Agreement. Radius may terminate the Pharmaceutical Development Agreement at any time and for any reason with a specified prior notice period to Ipsen. Either party may terminate the Pharmaceutical Development Agreement upon a material breach by the other party with respect to the Pharmaceutical Development Agreement or the Ipsen License Agreement unless such other party cures the alleged breach within the notice period specified in the Development and Manufacturing Services Agreement. The Pharmaceutical Development Agreement contains other customary clauses and terms as are common in similar agreements in the industry. The Pharmaceutical Development Agreement was amended in July 2007, February 2009 and June 2010.

Eisai

In June 2006, we exclusively licensed the worldwide (except Japan) rights to research, develop, manufacture and commercialize RAD1901 and related products from Eisai. Specifically, we licensed the patent application that subsequently issued as US Patent No. 7612114, effective filing date (12/25/2003) entitled "Selective Estrogen Receptor Modulator", the corresponding foreign patent applications and continuing patent applications. As consideration for the rights to RAD1901, we paid Eisai an initial license fee of $500,000. In connection with the License Agreement, we have agreed to pay Eisai certain fees in the range of $1,000,000 to $20,000,000 (inclusive of the $500,000 initial license fee), payable upon the achievement of certain clinical and regulatory milestones. Should a product covered by the licensed technology be commercialized, we will be obligated to pay to Eisai royalties in a variable mid-single digit range based on net sales of the product on a country-by-country basis until the later of the last to expire of the licensed patents or the expiration of data protection clauses covering such product in such country; the royalty rate shall then be subject to reduction and the royalty obligation will expire at such time as sales of lawful generic version of such product account for more than a specified minimum percentage of the total sales of all products that contain the licensed compound. We were also granted the right to sublicense with prior written approval from Eisai, but subject to a right of first negotiation held by Eisai if we seek to grant sublicenses limited to particular Asian countries. If we sublicense the licensed technology to a third party, we will be obligated to pay Eisai, in addition to the milestones referenced above, a percentage of certain fees it receives from such sublicensee and royalties in low single digit range based on net sales of the sublicense. The license agreement expires on a country by country basis on the later of (i) date the last remaining valid claim in the licensed patents expires, lapses or is invalidated in that country, the Product is not covered by data protection clauses, and the sales of lawful generic version of the Product account for more than a specified percentage of the total sales of all pharmaceutical products containing the licensed compound in that country; or (ii) a period of 10 years after the first commercial sale of the licensed products in such country unless it is sooner terminated. The license agreement may be terminated by Radius with

Table of Contents

respect to the entire territory with prior notice to Eisai if we reasonably determine that the medical/scientific, technical, regulatory or commercial profile of the licensed product does not justify continued development or marketing. The license agreement can also be terminated by Eisai on a country by country basis at any time prior to the date on which we have filed for either a FDA NDA approval or a EMEA marketing approval with respect to a licensed product, upon prior written notice to Radius if Eisai makes a good faith determination that we have not used commercially reasonable efforts to develop the licensed product in the territory having reference to prevailing principles and time scales associated with the development, clinical testing and government approval of products of a like nature to such licensed product, unless such default is cured within the period specified in the license agreement or if not capable of being cured within such period we commence efforts to cure and makes diligent efforts to do so. Either party may also terminate the license agreement upon a material breach by the other party unless such other party cures the alleged breach within the notice period specified in the license agreement. Either party may also terminate the license agreement upon the bankruptcy or insolvency of the other party. Eisai may also terminate the license agreement with prior notice if we are acquired by or to transfers all of its pharmaceutical business assets (or an essential part of such assets) or more than a specified percentage of its voting stock to any third party person or organization, or to otherwise come under the control of, such a person or organization, whether resulting from merger, acquisition, consolidation or otherwise in the event that Eisai reasonably determines that the person or organization assuming control of us is not able to perform the license agreement with the same degree of skill and diligence that we would use, such determination being made with reference to the following criteria with respect to the person or organization assuming control of us: (1) whether such person or organization has the financial resources to assume our obligations with respect to development and commercialization of products; (2) whether such person or organization has personnel with skill and experience adequate to assume our obligations with respect to development and commercialization of products at the stage of development and commercialization as of the date of such change; and (3) whether such person or organization expressly assumes all obligations imposed on us by the license agreement and agrees to dedicate personnel and financial resources to the development and commercialization of the licensed product that are at least as great as those provided by us. Eisai shall further have the right to terminate if the acquiring person or organization (a) has any material and active litigations with Eisai; (b) is a certain type of pharmaceutical company; or (c) is a hostile takeover bidder against Radius which has not been approved by the Board of Directors of Radius as constituted immediately prior to such change of control. The license agreement contains customary risk allocation clauses with each party indemnifying the other in respect of third party claims arising out of or resulting from: (i) the negligence, reckless or intentional acts or omissions of such party, its affiliates, and licensees; (ii) any breach by such party of its representations and warranties; and (iii) any personal injury arising out of the labeling, packaging, package insert, other materials or promotional claims with respect to any licensed product by such party or its affiliates, licensees or distributors in the territory (in the case of Radius) or Japan (in the case of Eisai). The license agreement contains other customary clauses and terms as are common in similar agreements in the industry.

Lonza

In October 2007, we entered into Development and Manufacturing Services Agreement with LONZA. Radius and Lonza have entered into a series of Work Orders pursuant to the Development and Manufacturing Services Agreement pursuant to which Lonza has performed pharmaceutical development and manufacturing services for the our BA058 product. Radius pays Lonza for services rendered and deliverables delivered pursuant to these work orders on a fee for service basis as specified in the applicable work statement. The Development and Manufacturing Services Agreement will expire on April 4, 2013 unless it is sooner terminated, and is subject to renewal by us for successive multiple-year terms with notice to Lonza. The Development and Manufacturing Services Agreement or any Work Order may be terminated by either party upon a material breach by the other party with

Table of Contents

respect to the Development and Manufacturing Services Agreement unless such other party cures the alleged breach within the notice period specified in the Development and Manufacturing Services Agreement. Either party may also terminate a Work Order if force majeure conditions have prevented performance by the other party for more than a specified period of time with respect to such Work Order. Termination of any Work Order for force majeure shall not result in termination of the Development and Manufacturing Services Agreement or any other Work Orders, which shall remain in force until terminated. Either party may also terminate the Development and Manufacturing Services Agreement upon the bankruptcy or insolvency of the other party. We may also terminate the Development and Manufacturing Services Agreement or any Work Order with prior notice to Lonza for convenience. We may also terminate the Development and Manufacturing Services Agreement or any Work Order if we reasonably determines that Lonza is or will be unable to perform the applicable services in accordance with the agreed upon timeframe and budget set forth in the applicable Work Order, or if Lonza fails to obtain or maintain any material governmental licenses or approvals required in connection with such services. The Development and Manufacturing Services Agreement contains customary risk allocation clauses with each party indemnifying the other in respect of third party claims arising out of or resulting from: (i) the negligence or willful misconduct of such party, its affiliates and their respective officers, directors, employees and agents in performing its obligations under the Developing and Manufacturing Services Agreement; and (ii) any breach by such party of its representations and warranties under the Development and Manufacturing Services Agreement. We have agreed to indemnify Lonza in respect of third party claims arising from or relating to the use of our product.

Charles River Laboratories

In March 2004, we entered into a Laboratory Services and Confidentiality Agreement with Charles River Laboratories, Inc. ("CRLI") and amended this agreement on November 7, 2008. Radius has entered into a series of letter agreements with CRLI pursuant to this Laboratory Services and Confidentiality Agreement, covering the performance of certain testing and analytical services concerning our product candidates. We pay CRLI for services rendered and deliverables delivered pursuant to these letter agreements on a fee for service basis. We are permitted to terminate any on-going Study under the Laboratory Services and Confidentiality Agreement at any time with the specified prior notice to CRLI and subject to the payment of applicable Study costs and fees. Either party may terminate the Laboratory Services and Confidentiality Agreement at any time with the specified prior notice to the other party and subject to the completion of any then on-going Studies and the payment by us of any fees for such Studies. Either party may also terminate the Laboratory Services and Confidentiality Agreement upon a material breach by the other party unless such other party cures the alleged breach within the notice period specified in the Laboratory Services and Confidentiality Agreement. The Laboratory Services and Confidentiality Services Agreement contains customary risk allocation clauses with each party indemnifying the other in respect of third party claims arising out of or in connection with the negligence or willful misconduct of such party. Radius also indemnifies CRLI in respect of third party claims arising out of or in connection with (i) the manufacture, distribution, use, sales or other disposition by us, or any of our distributors, customers, sublicensees or representatives, of any of our products or processes and/or any other substances which are produced, purified, tested or vialed by CRLI. We also indemnify CRLI against any and all liability that may be incurred as the result of any contact by us or our employees with CRLI's animals, tissues or specimens during visits to CRLI or after delivery of any samples/specimens to us. The Laboratory Services and Confidentiality Agreement contains other customary clauses and terms as are common in similar agreements in the industry.

Table of Contents

Government Regulation

U.S. FDA Process. The research, development, testing, manufacture, labeling, promotion, advertising, distribution, and marketing, among other things, of our products are extensively regulated by governmental authorities in the United States and other countries. In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or the "FDCA," and its implementing regulations. Failure to comply with the applicable U.S. requirements may subject us to administrative or judicial sanctions, such as FDA refusal to approve pending New Drug Applications, or NDAs, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, and/or criminal prosecution. We expect the BA058, RAD1901 and RAD140 will each be subject to review by the FDA as a drug under NDA standards though we currently only have an active IND in relation to BA058 in the U.S.

Drug Approval Process. None of our drugs may be marketed in the U.S. until the drug has received FDA approval. The steps required before a drug may be marketed in the U.S. include:

preclinical laboratory tests, animal studies, and formulation studies;

submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin;

adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug for each indication;

submission to the FDA of an NDA;

satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practices, or "cGMPs"; and

FDA review and approval of the NDA.

Preclinical tests include laboratory evaluation of product chemistry, toxicity, and formulation, as well as animal studies. The conduct of the preclinical tests and formulation of the compounds for testing must comply with federal regulations and requirements. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND, which must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions about issues such as the conduct of the trials as outlined in the IND. In such a case, the IND sponsor and the FDA must resolve any outstanding FDA concerns or questions before clinical trials can proceed. The Company cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin.

Clinical trials involve the administration of the investigational drug to human subjects under the supervision of qualified investigators. Clinical trials are conducted under protocols detailing the objectives of the study, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND.

Clinical trials necessary for product approval are typically conducted in three sequential Phases, but the Phases may overlap. The study protocol and informed consent information for study subjects in clinical trials must also be approved by an Institutional Review Board for each institution where the trials will be conducted. Study subjects must sign an informed consent form before participating in a clinical trial. Phase 1 usually involves the initial introduction of the investigational drug into people to evaluate its short-term safety, dosage tolerance, metabolism, pharmacokinetics and pharmacologic actions, and, if possible, to gain an early indication of its effectiveness. Phase 1 studies are usually conducted in healthy individuals and are not intended to treat disease or illness. However, Phase 1b

Table of Contents

studies are conducted in healthy volunteers or in patients diagnosed with the disease, or condition for which the study drug is intended, who demonstrate some biomarker, surrogate, or possibly clinical outcome that could be considered for "proof of concept." Proof of concept in a Phase 1b study typically confirms the hypothesis that the current prediction of biomarker, or outcome benefit is compatible with the mechanism of action. Phase 2 usually involves trials in a limited patient population to (i) evaluate dosage tolerance and appropriate dosage; (ii) identify possible adverse effects and safety risks; and (iii) evaluate preliminarily the efficacy of the drug for specific indications. Several different doses of the drug may be looked at in Phase 2 to see which dose has the desired effects. Patients are monitored for side effects and for any improvement in their illness, symptoms, or both. Phase 3 trials usually further evaluate clinical efficacy and test further for safety by using the drug in its final form in an expanded patient population. A Phase 3 trial usually compares how well the study drug works compared with an inactive placebo and/or another approved medication. One group of patients may receive the new drug being tested, while another group of patients may receive the comparator drug (already-approved drug for the disease being studied), or placebo. There can be no assurance that Phase 1, Phase 2, or Phase 3 testing will be completed successfully within any specified period of time, if at all. Furthermore, the Company or the FDA may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

The FDCA permits FDA and the IND sponsor to agree in writing on the design and size of clinical studies intended to form the primary basis of an effectiveness claim in an NDA. This process is known as Special Protocol Assessment or SPA. These agreements may not be changed after the clinical studies begin, except in limited circumstances.

Assuming successful completion of the required clinical testing, the results of the preclinical studies and of the clinical studies, together with other detailed information, including information on the manufacture and composition of the drug, are submitted to the FDA in the form of an NDA requesting approval to market the product for one or more indications. The testing and approval process requires substantial time, effort, and financial resources. The agencies review the application and may deem it to be inadequate to support the registration, and companies cannot be sure that any approval will be granted on a timely basis, if at all. The FDA may also refer the application to the appropriate advisory committee, typically a panel of clinicians, for review, evaluation and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendations of the advisory committee.

The FDA has various programs, including fast track, priority review, and accelerated approval, that are intended to expedite or simplify the process for reviewing drugs, and/or provide for approval on the basis surrogate endpoints. Generally, drugs that may be eligible for one or more of these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs, and those that provide meaningful benefit over existing treatments. A company cannot be sure that any of its drugs will qualify for any of these programs, or that, if a drug does qualify, that the review time will be reduced.

Before approving an NDA, the FDA usually will inspect the facility or the facilities at which the drug is manufactured and will not approve the product unless the manufacturing is in compliance with current good manufacturing practice, or cGMP. If the NDA and the manufacturing facilities are deemed acceptable by the Agency, the FDA may issue an approval letter, or in some cases, an approvable letter followed by an approval letter. Both letters usually contain a number of conditions that must be met in order to secure final approval of the NDA. When and if those conditions have been met to the FDA's satisfaction, the FDA will issue an approval letter. The approval letter authorizes commercial marketing of the drug for specific indications. As a condition of NDA approval, the FDA may require post-marketing testing and surveillance to monitor the drug's safety or efficacy, or impose other conditions.

Table of Contents

After approval, certain changes to the approved product, such as adding new indications, making certain manufacturing changes, or making certain additional labeling claims, are subject to further FDA review and approval. Before a company can market products for additional indications, it must obtain additional approvals from FDA. Obtaining approval for a new indication generally requires that additional clinical studies be conducted. A company cannot be sure that any additional approval for new indications for any product candidate will be approved on a timely basis, or at all.

Post-Approval Requirements. Often times, even after a drug has been approved by the FDA for sale, the FDA may require that certain post-approval requirements be satisfied, including the conduct of additional clinical studies. If such post-approval conditions are not satisfied, the FDA may withdraw its approval of the drug. In addition, holders of an approved NDA are required to: (i) report certain adverse reactions to the FDA, (ii) comply with certain requirements concerning advertising and promotional labeling for their products, and (iii) continue to have quality control and manufacturing procedures conform to cGMP after approval. The FDA periodically inspects the sponsor's records related to safety reporting and/or manufacturing facilities; this latter effort includes assessment of ongoing compliance with cGMP. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. We intend to use third party manufacturers to produce our products in clinical and commercial quantities, and future FDA inspections may identify compliance issues at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved NDA, including withdrawal of the product from the market.

Hatch-Waxman Act: Under the Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Act, Congress created an abbreviated FDA review process for generic versions of pioneer (brand name) drug products. In considering whether to approve such a generic drug product, the FDA requires that an Abbreviated New Drug Application, or ANDA, applicant demonstrate, among other things, that the proposed generic drug product's active ingredient is the same as that of the reference product, that any impurities in the proposed product do not affect the product's safety or effectiveness, and that its manufacturing processes and methods ensure the consistent potency and purity of its proposed product.

The Hatch-Waxman Act provides 5 years of data exclusivity for new chemical entities which prevents FDA from accepting ANDAs and 505(b)(2) applications containing the protected active ingredient. We expect to be eligible for 5 years of data exclusivity following FDA approval of BA058 Injection.

The Hatch-Waxman Act also provides 3 years of exclusivity for applications containing the results of new clinical investigations (other than bioavailability studies) essential to the FDA's approval of new uses of approved products, such as new indications, delivery mechanism, dosage forms, strengths, or conditions of use. For example, if BA058 Injection is approved for commercialization and we are successful in performing a clinical trial of the BA058 Microneedle Patch product that provides a new basis for approval (a different delivery mechanism) it is possible that we may become eligible for an additional 3 year period of data exclusivity which protects against the approval of ANDAs and 505(b)(2) applications for the protected use and will not prohibit the FDA from accepting or approving ANDAs or 505(b)(2) applications for other products containing the same active ingredient.

The Hatch-Waxman Act requires NDA applicants and NDA holders to provide certain information about patents related to the drug for listing in the FDA's list of Approved Drug Products with Therapeutic Equivalence Evaluations (commonly known as the Orange Book). ANDA and 505(b)(2) applicants must then certify regarding each of the patents listed with the FDA for the reference product. A certification that a listed patent is invalid or will not be infringed by the marketing of the applicant's product is called a "Paragraph IV certification." If the ANDA or 505(b)(2) applicant

Table of Contents

provides such a notification of patent invalidity or noninfringement, then the FDA may accept the ANDA or 505(b)(2) application beginning four years after approval of the NDA. If an ANDA or 505(b)(2) application containing a Paragraph IV certification is submitted to the FDA and accepted as a reviewable filing by the agency, the ANDA or 505(b)(2) applicant then must provide, within 20 days, notice to the NDA holder and patent owner stating that the application has been submitted and providing the factual and legal basis for the applicant's opinion that the patent is invalid or not infringed. The NDA holder or patent owner then may file suit against the ANDA or 505(b)(2) applicant for patent infringement. If this is done within 45 days of receiving notice of the Paragraph IV certification, a one-time 30-month stay of the FDA's ability to approve the ANDA or 505(b)(2) application is triggered. The 30-month stay begins at the end of the NDA holder's data exclusivity period, or, if data exclusivity has expired, on the date that the patent holder is notified of the submission of the ANDA. The FDA may approve the proposed product before the expiration of the 30-month stay if a court finds the patent invalid or not infringed or if the court shortens the period because the parties have failed to cooperate in expediting the litigation.

EU EMA Process

In the European Union, or the EU, medicinal products are authorized following a similar demanding process as that required in the U.S. Applications are based on the ICH Common Technical Document and must include a detailed plan for pediatric approval, if such approval is sought. Medicinal products must be authorized in one of two ways, either through the decentralized procedure or mutual recognition procedure by the competent authorities of the EU Member States, or through the centralized procedure by the European Commission following an opinion by the European Medicines Agency, or EMA. The authorization process is essentially the same irrespective of which route is used. In light of the fact that there is no policy at the EU level governing pricing and reimbursement, the 27 EU Member States each have developed their own, often varying, approaches. In many EU Member States, pricing negotiations must take place between the Marketing Authorization Holder and the competent national authorities before the product is sold in their market with Marketing Authorization Holders required to provide evidence demonstrating the pharmaco-economic superiority of their product in comparison with directly and indirectly competing products. We have reviewed our development program, proposed Phase 3 study design, and overall non-clinical and clinical data package to support future regulatory approval of the BA058 Injection with EMA but have not initiated any discussions with EMA with respect to seeking regulatory approval of our other products in Europe.

Good manufacturing practices. Like the FDA, the EMA, the competent authorities of the EU Member States and other regulatory agencies regulate and inspect equipment, facilities, and processes used in the manufacturing of pharmaceutical and biologic products prior to approving a product. If, after receiving clearance from regulatory agencies, a company makes a material change in manufacturing equipment, location, or process, additional regulatory review and approval may be required. Once we or our partners commercialize products, we will be required to comply with cGMP, and product-specific regulations enforced by, the European Commission, the EMA and the competent authorities of EU Member States following product approval. Also like the FDA, the EMA, the competent authorities of the EU Member States and other regulatory agencies also conduct regular, periodic visits to re-inspect equipment, facilities, and processes following the initial approval of a product. If, as a result of these inspections, it is determined that our or our partners' equipment, facilities, or processes do not comply with applicable regulations and conditions of product approval, regulatory agencies may seek civil, criminal, or administrative sanctions and/or remedies against us, including the suspension of our manufacturing operations or the withdrawal of our product from the market.

Table of Contents

Other International Markets Drug approval process

In some international markets (e.g., China or Japan), although data generated in U.S. or EU trials may be submitted in support of a marketing authorization application, additional clinical trials conducted in the host territory, or studying people of the ethnicity of the host territory, may be required prior to the filing or approval of marketing applications within the country.

Pricing and Reimbursement

In the U.S. and internationally, sales of products that we market in the future, and our ability to generate revenues on such sales, are dependent, in significant part, on the availability and level of reimbursement from third-party payors such as state and federal governments, managed care providers, and private insurance plans. Private insurers, such as health maintenance organizations and managed care providers, have implemented cost-cutting and reimbursement initiatives and likely will continue to do so in the future. These include establishing formularies that govern the drugs and biologics that will be offered and also the out-of-pocket obligations of member patients for such products. In addition, particularly in the U.S. and increasingly in other countries, we are required to provide discounts and pay rebates to state and federal governments and agencies in connection with purchases of our products that are reimbursed by such entities. It is possible that future legislation in the U.S. and other jurisdictions could be enacted which could potentially impact the reimbursement rates for the products we are developing and may develop in the future and also could further impact the levels of discounts and rebates paid to federal and state government entities. Any legislation that impacts these areas could impact, in a significant way, our ability to generate revenues from sales of products that, if successfully developed, we bring to market.

There is no legislation at the EU level governing the pricing and reimbursement of medicinal products in the EU. As a result, the competent authorities of each of the 27 EU Member States have adopted individual strategies regulating the pricing and reimbursement of medicinal products in their territory. These strategies often vary widely in nature, scope and application. However, a major element that they have in common is an increased move towards reduction in the reimbursement price of medicinal products, a reduction in the number and type of products selected for reimbursement and an increased preference for generic products over innovative products. These efforts have mostly been executed through these countries' existing price-control methodologies. The government of the UK, while continuing for now to utilize its established Pharmaceutical Pricing Reimbursement Scheme approach, has announced its intentions to phasing in, by 2014, a new value-based pricing approach, at least for new product introductions. Under this approach, in a complete departure from established methodologies, reimbursement levels of each drug will be explicitly based on an assessment of value, looking at the benefits for the patient, unmet need, therapeutic innovation, and benefit to society as a whole. It is increasingly common in many EU Member States for Marketing Authorization Holders to be required to demonstrate the pharmaco-economic superiority of their products as compared to products already subject to pricing and reimbursement in specific countries. In order for drugs to be evaluated positively under such criteria, pharmaceutical companies may need to re-examine, and consider altering, a number of traditional functions relating to the selection, study, and management of drugs, whether currently marketed, under development, or being evaluated as candidates for research and/or development.

Future legislation, including the current versions being considered at the federal level in the U.S. and at the national level in EU Member States, or regulatory actions implementing recent or future legislation may have a significant effect on our business. Our ability to successfully commercialize products depends in part on the extent to which reimbursement for the costs of our products and related treatments will be available in the U.S. and worldwide from government health administration authorities, private health insurers and other organizations. Substantial uncertainty exists as to the reimbursement status of newly approved health care products by third-party payors.

Table of Contents

Sales and Marketing

The FDA regulates all advertising and promotion activities for products under its jurisdiction both prior to and after approval. A company can make only those claims relating to safety and efficacy that are approved by the FDA. Physicians may prescribe legally available drugs for uses that are not described in the drug's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties, and often reflect a physician's belief that the off-label use is the best treatment for the patients. The FDA does not regulate the behavior of physicians in their choice of treatments, but FDA regulations do impose stringent restrictions on manufacturers' communications regarding off-label uses. Failure to comply with applicable FDA requirements may subject a company to adverse publicity, enforcement action by the FDA, corrective advertising, consent decrees and the full range of civil and criminal penalties available to the FDA.

We may also be subject to various federal and state laws pertaining to health care "fraud and abuse," including anti-kickback laws and false claims laws. Anti-kickback laws make it illegal for a prescription drug manufacturer to solicit, offer, receive, or pay any remuneration in exchange for, or to induce, the referral of business, including the purchase or prescription of a particular drug. Due to the breadth of the statutory provisions and the absence of guidance in the form of regulations and very few court decisions addressing industry practices, it is possible that our practices might be challenged under anti-kickback or similar laws. False claims laws prohibit anyone from knowingly and willingly presenting, or causing to be presented for payment to third-party payors (including Medicare and Medicaid) claims for reimbursed drugs or services that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services. Our activities relating to the sale and marketing of our products may be subject to scrutiny under these laws. Violations of fraud and abuse laws may be punishable by criminal and/or civil sanctions, including fines and civil monetary penalties, the possibility of exclusion from federal health care programs (including Medicare and Medicaid) and corporate integrity agreements, which impose, among other things, rigorous operational and monitoring requirements on companies. Similar sanctions and penalties also can be imposed upon executive officers and employees, including criminal sanctions against executive officers under the so-called "responsible corporate officer" doctrine, even in situations where the executive officer did not intend to violate the law and was unaware of any wrongdoing. Given the remedies that can be imposed on companies and individuals if convicted, allegations of such violations often result in settlements even if the company or individual being investigated admits no wrongdoing. Settlements often include significant civil sanctions, including fines and civil monetary penalties, and corporate integrity agreements. If the government were to allege or convict us or our executive officers of violating these laws, our business could be harmed. In addition, private individuals have the ability to bring similar actions. Our activities could be subject to challenge for the reasons discussed above and due to the broad scope of these laws and the increasing attention being given to them by law enforcement authorities. Further, there are an increasing number of state laws that require manufacturers to make reports to states on pricing and marketing information. Many of these laws contain ambiguities as to what is required to comply with the laws. Given the lack of clarity in laws and their implementation, our reporting actions could be subject to the penalty provisions of the pertinent state authorities.

Similar rigid restrictions are imposed on the promotion and marketing of medicinal products in the EU and other countries. Laws (including those governing promotion, marketing and anti-kickback provisions), industry regulations and professional codes of conduct often are strictly enforced. Even in those countries where we are not directly responsible for the promotion and marketing of our products, inappropriate activity by our international distribution partners can have implications for us.

Other Laws and Regulatory Processes

We are subject to a variety of financial disclosure and securities trading regulations as a public company in the U.S., including laws relating to the oversight activities of the Securities and Exchange

Table of Contents

Commission, or SEC, and, if any or our capital stock becomes listed on a national securities exchange, we will be subject to the regulations of such exchange on which our shares are traded. In addition, the Financial Accounting Standards Board, or FASB, the SEC, and other bodies that have jurisdiction over the form and content of our accounts, our financial statements and other public disclosure are constantly discussing and interpreting proposals and existing pronouncements designed to ensure that companies best display relevant and transparent information relating to their respective businesses.

Our international operations are subject to compliance with the Foreign Corrupt Practices Act, or the FCPA, which prohibits corporations and individuals from paying, offering to pay, or authorizing the payment of anything of value to any foreign government official, government staff member, political party, or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. We also may be implicated under the FCPA for activities by our partners, collaborators, contract research organizations, or CROs, vendors or other agents.

Our present and future business has been and will continue to be subject to various other laws and regulations. Various laws, regulations and recommendations relating to safe working conditions, laboratory practices, the experimental use of animals, and the purchase, storage, movement, import and export and use and disposal of hazardous or potentially hazardous substances used in connection with our research work are or may be applicable to our activities. Certain agreements entered into by us involving exclusive license rights or acquisitions may be subject to national or supranational antitrust regulatory control, the effect of which cannot be predicted. The extent of government regulation, which might result from future legislation or administrative action, cannot accurately be predicted.

Intellectual Property

As of July 20, 2011, we owned 1 issued U.S. patent, as well as 10 pending U.S. patent applications and 28 pending foreign patent applications in Europe and 16 other jurisdictions. As of July 20, 2011, we had licenses to 9 U.S. patents 1 U.S. patent applications as well as numerous foreign counterparts to many of these patents and patent applications. We licensed these patents and patent applications on an exclusive basis for all countries except Japan though our rights in France with respect to BA058 are subject to certain co-promotion and co-marketing rights held by Ipsen and our rights to sublicense in certain Asia Pacific countries in respect of RAD1901 are subject to a right of first refusal held by Eisai, all as described herein in our discussion of our license agreements with Ipsen and Eisai.

Employees

As of the date of this Report, we employed seven full-time employees and three part-time employees, four of whom held Ph.D. or M.D. degrees. Four of our employees were engaged in research and development activities and six were engaged in support administration, including business development, and finance. In addition, we intend to use clinical research organizations and third parties to perform our clinical studies and manufacturing.

Properties

On July 15, 2011, we entered into a Lease (the "Lease") for our executive offices with Broadway Hampshire Associates Limited Partnership (the "Landlord") for approximately 5,672 rentable square feet of space in the building located at 201 Broadway, Cambridge, Massachusetts 02139. Our telephone number is (617) 551-4700.

The Lease has an initial term of three years, commencing on August 1, 2011 and expiring on July 31, 2014. Pursuant to the Lease, our monthly base rent is $15,125.33 in year 1, $15,598.00 in year 2 and $16,070.67 in year 3 and we are required to pay additional monthly rent in an amount equal to our proportionate share of certain taxes and operating expenses, as further set forth in the Lease.

Table of Contents

An event of default under the Lease is defined as the occurrence of any of the following events: failure to pay rent within five business days after the same is due and payable; provided, however, on the first occasion of failure to pay rent when due the Landlord will provide us with notice and permit us a five-day period to cure such failure after providing such written notice; failure to pay additional monthly rent within ten days after the same is due and payable; failure to perform or observe any other covenant or obligation under the Lease provided the same is not cured within thirty days; the voluntary filing of bankruptcy or any other petition for the relief of debt, acquiescence in the appointment of a bankruptcy trustee or a consent to the assignment of assets; and the involuntary petition against us under the bankruptcy code which is not dismissed within sixty days.

A copy of the Lease was previously filed on our Current Report on Form 8-K filed with the SEC on August 11, 2011.

Legal Proceedings

We are not currently involved in any material legal proceedings.

Recent Developments

Pursuant to an Agreement and Plan of Merger dated April 25, 2011 (the "Merger Agreement"), by and among MPM Acquisition Corp. (referred to herein as the "Company", "Radius" or the "Registrant"), RHI Merger Corp., a Delaware corporation and wholly owned subsidiary of the Company ("MergerCo"), and the Former Operating Company, MergerCo merged with and into the Former Operating Company, with the Former Operating Company remaining as the surviving entity and a wholly-owned operating subsidiary of the Company. The Merger was effective as of May 17, 2011, upon the filing of a certificate of merger with the Delaware Secretary of State.

At the Effective Time, the legal existence of MergerCo ceased and all of the shares of the Former Operating Company Common Stock, and shares of the Former Operating Company Preferred Stock, that were outstanding immediately prior to the Merger were cancelled and each outstanding share of Former Operating Company Common Stock outstanding immediately prior to the Effective Time was automatically converted into the right to receive one share of our Common Stock and each outstanding share of Former Operating Company Preferred Stock outstanding immediately prior to the Effective Time was automatically converted into the right to receive one-tenth of one share of our Preferred Stock from the Company as consideration for the Merger. More specifically, each share of Series A-1 Convertible Preferred Stock of Former Operating Company outstanding immediately prior to the Effective Time was converted into the right to receive 0.1 shares of Series A-1 Preferred Stock of the Company; each share of Series A-2 Convertible Preferred Stock of the Former Operating Company outstanding immediately prior to the Effective Time was converted into the right to receive 0.1 shares of Series A-2 Convertible Preferred Stock of the Company; each share of Series A-3 Convertible Preferred Stock of the Former Operating Company outstanding immediately prior to the Effective Time was converted into the right to receive 0.1 shares of Series A-3 Convertible Preferred Stock of the Company; each share of Series A-4 Convertible Preferred Stock of the Former Operating Company's outstanding immediately prior to the Effective Time was converted into the right to receive 0.1 shares of Series A-4 Convertible Preferred Stock of the Company; each share of Series A-5 Convertible Preferred Stock of the Former Operating Company's outstanding immediately prior to the Effective Time was converted into the right to receive 0.1 shares of Series A-5 Convertible Preferred Stock of the Company; and each share of Series A-6 Convertible Preferred Stock of the Former Operating Company outstanding immediately prior to the Effective Time was converted into the right to receive 0.1 shares of Series A-6 Convertible Preferred Stock of the Company. The Company will assume all outstanding options and warrants of the Former Operating Company outstanding immediately prior to the Effective Time, which shall become exercisable for shares of Company Common Stock or Company Preferred Stock, as the case may be. See the description of the options

Table of Contents

and warrants assumed in the merger in sections herein entitled "2003 Long-Term Incentive Plan" and "Description of Capital Stock," respectively. Our entry into the Merger Agreement was disclosed on our Current Report on Form 8-K filed with the Securities and Exchange Commission on April 25, 2011, as amended on September 30, 2011, which is hereby incorporated by reference, including the copy of the Merger Agreement filed as Exhibit 10.1 thereto.

Prior to the closing of the Merger, pursuant to the terms of a Redemption Agreement dated March 25, 2011 by and among us and our then-current stockholders, we completed the repurchase of 5,000,000 shares of Common Stock (the "Redemption") from our former sole stockholder, MPM Asset Management LLC, in consideration of an aggregate of $50,000. The 5,000,000 shares constituted all of the issued and outstanding shares of our capital stock, on a fully-diluted basis, immediately prior to the Merger. Our entry into the Redemption Agreement was disclosed on our Current Report on Form 8-K filed with the Securities and Exchange Commission on April 25, 2011, which is hereby incorporated by reference, including the copy of the Redemption Agreement filed as Exhibit 10.2 thereto. Upon completion of the Merger and the Redemption, the former stockholders of the Former Operating Company held 100% of our outstanding shares of capital stock.

Pursuant to the Merger, we assumed all of the Former Operating Company's obligations under its existing contracts. In particular, we have assumed the obligations of the Former Operating Company under the Original Purchase Agreement with the Investors pursuant to which, among other things, the Former Operating Company agreed to issue and sell to the Investors up to an aggregate of 7,895,535 shares of the Former Operating Company's Preferred Stock, to be completed in the Stage I Closing, the Stage II Closing and the Stage III Closing. The Original Purchase Agreement was subsequently amended by Amendment No. 1 thereto to eliminate all closing conditions previously provided for in the Original Purchase Agreement. Upon notice from us, the Investors are obligated to purchase, and we are obligated to issue, 263,178 shares of our Series A-1 Preferred Closing at the Stage II Closing and 263,180 shares of our Series A-1 Preferred Stock at the Stage III Closing, each at a purchase price per share of $81.42. There are no conditions to funding if we notify the Investors of any such closing. A copy of the Purchase Agreement is attached hereto as Exhibit 10.26, and is incorporated herein by reference.

The foregoing description of the Merger Agreement, the Redemption Agreement, Purchase Agreement and the transactions contemplated thereby do not purport to be complete and are qualified in their entireties by reference to the Merger Agreement and the Redemption Agreement, respectively.

Following the Merger on May 17, 2011, our Board of Directors approved a transaction pursuant to which the Former Operating Company merged with and into us, leaving us as the surviving corporation (the "Short-Form Merger" and together with the Merger, the "Reverse Merger"). In connection with the Short-Form Merger, we relinquished our corporate name and assumed in its place the name "Radius Health, Inc." The Short-Form and name change became effective on May 17, 2011, upon the filing of a Certificate of Ownership an Merger with the Delaware Secretary of State.

On May 23, 2011, we entered into a Loan and Security Agreement with GEC as agent and a lender, and Oxford, as a lender, pursuant to which the Lenders agreed to make available $25,000,000 in the aggregate over three term loans. The Initial Term Loan was made on May 23, 2011 in an aggregate principal amount equal to $6,250,000 and is repayable over a term of 42 months, including a six month interest only period. The Initial Term Loan bears interest at 10%. Pursuant to the Agreement, we may request two (2) additional term loans, the first, which must be funded not later than November 23, 2011, in an aggregate principal amount equal to $6,250,000 and the second, which must be funded not later than May 23, 2012, in an aggregate principal amount equal to $12,500,000. In the event the Second Term Loan is not funded on or before November 23, 2011, the Lenders' commitment to make the Second Term Loan shall be terminated and the total commitment shall be reduced by $6,250,000. In the event the Third Term Loan is not funded on or before May 23, 2012, the Lenders' commitment

Table of Contents

to make the Third Term Loan shall be terminated and the total commitment shall be further reduced by $12,500,000. Pursuant to the agreement, we agreed to issue to the Lenders (or their respective affiliates or designees) the Warrants to purchase in the aggregate a number of shares of our Series A-1 Preferred Stock equal to the quotient of (a) the product of (i) the amount of the applicable term loan multiplied by (ii) four percent (4%) divided by (b) the exercise price equal to $81.42 per share. The exercise period of each Warrant to be issued will expire ten (10) years from the date such Warrants are issued. On May 23, 2011, we issued a Warrant to each of GECC and Oxford for the purchase of 3,070 shares of Series A-1 Preferred stock.

On May 23, 2011, we filed a Current Report on Form 8-K relating to the foregoing and disclosing the Form 10 information required in connection with the Reverse Merger.

Table of Contents

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussions in conjunction with our consolidated financial statements and related notes included in this prospectus. This discussion includes forward-looking statements that involve risk and uncertainties. As a result of many factors, such as those set forth under "Risk Factors," actual results may differ materially from those anticipated in these forward-looking statements.

Overview

We are a pharmaceutical company focused on acquiring and developing new therapeutics for the treatment of osteoporosis and other women's health conditions. We have three product candidates in development, the most advanced is BA058 Injection that has begun dosing of patients in a pivotal Phase 3 clinical study for the prevention of fractures in women suffering from osteoporosis. We are also developing the BA058 Microneedle Patch, a short wear time, transdermal form of BA058 that is based on a microneedle technology from 3M that is currently being studied in a Phase 1b clinical study. We believe that the BA058 Microneedle Patch may eliminate the need for injections and lead to better treatment compliance for patients. Our second clinical stage product candidate is RAD1901 which has completed an initial Phase 2 clinical study for the treatment of vasomotor symptoms, commonly known as hot flashes, in women entering menopause. Our third product candidate, RAD140, in pre-IND discovery, is a potential treatment for age-related muscle loss, frailty, weight loss associated with cancer cachexia and osteoporosis.

BA058 is a novel synthetic peptide analog of Parathyroid hormone-related peptide (hPTHrP) being developed by us as a bone anabolic treatment for osteoporosis. hPTHrP is a critical cytokine for the regulation of bone formation, able to rebuild bone with low associated risk of inducing hypercalcemia as a side-effect. In August 2009, we announced positive Phase 2 data that showed BA058 Injection produced faster and greater bone mineral density (BMD) increases at the spine and the hip after 6 months and 12 months of treatment than did Forteo®, which was a comparator in our study. Key findings were that the highest dose of BA058 tested of 80 µg increased mean lumbar spine BMD at 6 and 12 months by 6.7% and 12.9% compared to the increases seen with Forteo® trial arms of 5.5% and 8.6%, respectively. BA058 also produced increases in mean femoral neck BMD at the hip at 6 and 12 months of 3.1% and 4.1% compared to increases for Forteo® of 1.1% and 2.2%, respectively. We believe there to be a strong correlation between an increased level of BMD and a reduction in the risk of fracture for patients with osteoporosis. BA058 was generally safe and well tolerated in this study, with adverse events similar between the BA058, placebo and Forteo® groups. In addition, the occurrence of hypercalcemia as a side-effect was half that seen with Forteo® for the 80 µg dose of BA058. In April 2011, we began dosing of patients in a pivotal Phase 3 clinical study managed by Nordic and expect to report top-line data from this study in the first quarter of 2014. Our planned Phase 3 study will enroll a total of 2,400 patients to be randomized equally to receive daily doses of one of the following: 80 micrograms (µg) of BA058, a matching placebo, or the approved dose of 20 µg of Forteo® for 18 months. The study is powered to show that BA058 is superior to (i) placebo for fracture and (ii) Forteo® for greater BMD improvement at major skeletal sites and for a lower occurrence of hypercalcemia, a condition in which the calcium level in a patient's blood is above normal.

On May 17, 2011, the Merger and the Short-Form Merger were consummated whereby we, then a public shell company, was merged with the Former Operating Company. Our efforts and resources are focused primarily on acquiring and developing BA058 and our other pharmaceutical product candidates, raising capital and recruiting personnel. We have no product sales to date and we will not receive any product sales until we receive approval for BA058 Injection from the FDA, or equivalent foreign regulatory bodies. However, developing pharmaceutical products is a lengthy and very expensive process. Assuming we do not encounter any unforeseen delays during the course of developing BA058,

Table of Contents

we do not expect to complete development and file for marketing approval in the United States for BA058 Injection and BA058 Microneedle Patch until approximately late 2014 and 2016, respectively. Accordingly, our success depends not only on the safety and efficacy of BA058, but also on our ability to finance the development of these products, which will require substantial additional funding to complete development and file for marketing approval. Our ability to raise this additional financing will depend on our ability to execute on the BA058 development plan, complete patient enrollment in clinical studies in a timely fashion, manage and coordinate on a cost-effective basis all the required components of the BA058 Injection NDA package and scale-up the BA058 Microneedle Patch manufacturing capacity, as well as overall capital market conditions for development-stage companies.

In addition, we currently have no sales, marketing or distribution capabilities and thus our ability to market BA058 will depend in part on our ability to enter into and maintain collaborative relationships for such capabilities, the collaborator's strategic interest in the products under development and such collaborator's ability to successfully market and sell any such products. Our ability to secure a collaborator for BA058 will depend on the strength of our clinical data. However, we believe that there are certain favorable trends that will interest third parties to collaborate on BA058 including, increasing prevalence of osteoporosis due to an increase in the elderly population in most developed countries, increased availability and reimbursement of diagnostic facilities, growing physician and patient awareness regarding the importance of treating osteoporosis, and concerns regarding the long term safety profiles of the bisphosphonates prompting physicians to be interested in new therapies for osteoporosis. We are also evaluating strategic alternatives with respect to collaborating with third parties for the future development of RAD1901 and RAD140. Our ability to further develop these product candidates will be dependent upon the outcome of our collaboration strategy.

Financial Overview

Research and Development Expenses

Research and development expenses consist primarily of salaries and related personnel costs, fees paid to consultants and outside service providers for regulatory and quality assurance support, licensing of drug compounds, and other expenses relating to the manufacture, development, testing and enhancement of our product candidates. We expense our research and development cost as they are incurred.

Our lead product candidate is BA058 and it represents the largest portion of our research and development expenses for our product candidates. BA058 is a novel synthetic peptide analog of hPTHrP being developed by as a treatment for osteoporosis in both injection and transdermal routes of administration. BA058 Injection is currently in a Phase 3 study and BA058 Microneedle Patch is in a Phase 1b study. Our other clinical stage program is RAD1901, a selective estrogen receptor modulator, or SERM, which has completed an initial Phase 2 clinical study for the treatment of vasomotor symptoms, commonly known as hot flashes in women entering menopause. A Phase 2 study is designed to test the efficacy of a novel treatment and confirm the safety profile established in a Phase 1 trial. Our third product candidate, RAD140 is a selective androgen receptor modular, or SARM, is in pre-IND development.

The following table sets forth our research and development expenses related to BA058 injection, BA058 Microneedle Patch, RAD1901 and RAD140 for the years ended December 31, 2009 and 2010 and the six months ended June 30, 2010 and 2011. No research and development expenses in relation to our product candidates are currently borne by third parties. We began tracking program expenses for BA058 Injection in 2005, and program expenses from inception to June 30, 2011 were approximately $43,078,000. We began tracking program expenses for BA058 Microneedle Patch in 2007, and program expenses from inception to June 30, 2011 were approximately $8,215,000. We began tracking program expenses for RAD1901 in 2006, and program expenses from inception to June 30, 2011 were

Table of Contents

approximately $15,290,000. We began tracking program expenses for RAD140 in 2008, and program expenses from inception to June 30, 2011 were approximately $5,164,000. These expenses relate primarily to external costs associated with manufacturing, preclinical studies and clinical trial costs.

Costs related to facilities, depreciation, share-based compensation and research and development support services are not directly charged to programs as they benefit multiple research programs that share resources.

	Year ended December 31,		Six Months ended June 30,	
	2009	2010	2010	2011
	(in thousands)			
BA058 Injection	$ 3,671	$ 4,664	$ 661	$ 16,774
BA058 Microneedle Patch	2,819	1,863	857	2,758
RAD1901	2,185	1,654	1,040	
RAD140	2,031	313	287	23

The majority of our external costs are spent on BA058, as costs associated with later stage clinical trials are, in most cases, more significant than those incurred in earlier stages of our pipeline. In April 2011, we began dosing of patients in a pivotal Phase 3 clinical study of BA058 Injection for the treatment of osteoporosis. In addition, in December 2010, we initiated a Phase 1b clinical study for BA058 Microneedle Patch. We expect that future development costs related to the BA058 Injection and BA058 Microneedle Patch programs will increase significantly through possible marketing approval in the United States in late 2015 and 2017. For the BA058 Injection future development costs may exceed $160,000,000 including $125,000,000 for clinical costs, $18,000,000 for license and milestone payments and NDA filing fees, $10,000,000 for preclinical costs and $7,000,000 for manufacturing costs. For the BA058 Microneedle Patch future development costs may exceed $50,000,000, including $28,000,000 for clinical costs, $18,000,000 for manufacturing costs, $4,000,000 for preclinical costs and NDA filing fees. We expect to finance these future development costs of BA058 with our existing cash and cash equivalents and with the additional proceeds from the second and third closings of the Series A-1 financing available and proceeds of $18,250,000 pursuant to a loan and security agreement. In addition, our current strategy is to collaborate with third parties for the further development and commercialization of RAD1901 and RAD140 so we do not expect that that Company will incur substantial future costs for these programs as these costs will be borne by third parties. Our ability to further develop these product candidates will be dependent upon our ability to secure a third party partner and it is not possible to project the future development costs for RAD1901 and RAD140 or possible marketing approval timeline at this time.

The successful development of the BA058 Injection and BA058 Microneedle Patch is subject to numerous risks and uncertainties associated with developing drugs, including the variables listed below. A change in the outcome of any of these variables with respect to the development of any of our product candidates could mean a significant change in the costs and timing associated with the development of that product candidate.

BA058 Injection is our only product candidate in late stage development, and our business currently depends heavily on its successful development, regulatory approval and commercialization. We have no drug products for sale currently and may never be able to develop marketable drug products. We have not submitted an NDA to the FDA or comparable applications to other regulatory authorities. Obtaining approval of an NDA is an extensive, lengthy, expensive and uncertain process, and the FDA may delay, limit or deny approval of BA058 Injection for many reasons, including:

- we may not be able to demonstrate that BA058 is safe and effective as a treatment for osteoporosis to the satisfaction of the FDA;

Table of Contents

- the results of its clinical studies may not meet the level of statistical or clinical significance required by the FDA for marketing approval;
- the FDA may disagree with the number, design, size, conduct or implementation of our clinical studies;
- the clinical research organization, or CRO, that we retain to conduct clinical studies may take actions outside of our control that materially adversely impact our clinical studies or we could experience significant delays in enrollment in any of our clinical trials;
- the FDA may not find the data from preclinical studies and clinical studies sufficient to demonstrate that BA058's clinical and other benefits outweigh its safety risks;
- the FDA may disagree with our interpretation of data from our preclinical studies and clinical studies or may require that we conduct additional studies;
- the FDA may not accept data generated at its clinical study sites;
- if our NDA is reviewed by an advisory committee, the FDA may have difficulties scheduling an advisory committee meeting in a timely manner or the advisory committee may recommend against approval of our application or may recommend that the FDA require, as a condition of approval, additional preclinical studies or clinical studies, limitations on approved labeling or distribution and use restrictions;
- the FDA may require development of a Risk Evaluation and Mitigation Strategy, or REMS, as a condition of approval;
- the FDA may identify deficiencies in the manufacturing processes or facilities of our third-party manufacturers;
- the FDA may change its approval policies or adopt new regulations.

We are unable to determine the duration and costs to be incurred by the Company to continue development of RAD1901 and RAD140 until such time as we are able to secure a third party partner to collaborate on the further development and commercialization of these products. We anticipate that we will make determinations as to which additional programs to pursue and how much funding to direct to each program on an ongoing basis in response to the scientific and clinical data of each product candidate, progress on securing a third party partner, as well as ongoing assessments of such product candidate's commercial potential and our ability to fund such product development. If we are unable to continue to fund the development of RAD1901 and/or RAD140 and are unable to secure a third party partner for these product candidates, our business will be adversely affected and we will depend solely on the successful development, regulatory approval and commercialization of the BA058 Injection and BA058 Microneedle Patch.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related expense for executive, finance and other administrative personnel, professional fees, business insurance, rent, general legal activities, and other corporate expenses. We expect our general and administrative expenses to increase as a result of higher costs associated with being a public company.

Our results include non-cash compensation expense as a result of the issuance of stock and stock option grants. Compensation expense for options granted to employees and directors (excluding directors who are also scientific advisory board member or consultants) represent the difference between the fair value of our common stock and the exercise price of the options at the date of grant. Compensation for options granted to consultants has been determined based upon the fair value of the equity instruments issued and the unvested portion of such option

grants is re-measured at each

Table of Contents

reporting period. The stock-based compensation expense is included in the respective categories of expense in the statement of operations (research and development and general and administrative expenses). We expect to record additional non-cash compensation expense in the future, which may be significant.

Interest Income and Interest Expense

Interest income reflects interest earned on our cash, cash equivalents and marketable securities.

Interest expense reflects interest due on a Loan and Security Agreement under which we made the final payment in 2009, and interest due on a second Loan and Security Agreement which we entered into on May 23, 2011.

Accretion of Preferred Stock

Accretion of preferred stock reflects the periodic accretions of issuance costs, dividends and the investor rights/obligations on the Former Operating Company's Series B and C redeemable convertible preferred stock and accretion and dividends on the Former Operating Company's Series A-1, A-2 and A-3 convertible preferred stock.

Critical Accounting Policies and Estimates

The preparation of our financial statement requires us to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and expenses during the reported periods. We believe the following accounting policies are "critical" because they require us to make judgments and estimates about matters that are uncertain at the time we make the estimate, and different estimates, which would have been reasonable could have been used, which would have resulted in different financial results.

Accrued Clinical Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. Payments under some of the contracts we have with parties depend on factors, such as the milestones accomplished, successful enrollment of certain numbers of patients, site initiation and the completion of clinical trial milestones. Examples of estimated accrued clinical expenses include:

fees paid to investigative sites and laboratories in connection with clinical studies;

fees paid to CROs in connection with clinical studies, if CROs are used; and

fees paid to contract manufacturers in connection with the production of clinical study materials.

In accruing clinical expenses, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If possible, we obtain information regarding unbilled services directly from these service providers. However, we may be required to estimate the cost of these services based on information available to us. If we underestimate or overestimate the cost associated with a trial or service at a given point in time, adjustments to research and development expenses may be necessary in future periods. Historically, our estimated accrued clinical expenses have approximated actual expense incurred. Subsequent changes in estimates may result in a material change in our accruals.

Table of Contents

Research and Development Expenses

We account for research and development costs by expensing such costs to operations as incurred. Research and development costs primarily consist of personnel costs, outsourced research activities, laboratory supplies, and license fees.

Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are deferred and capitalized. The capitalized amounts will be expensed as the related goods are delivered or the services are performed. If expectations change such that we do not expect we will need the goods to be delivered or the services to be rendered, capitalized nonrefundable advance payments would be charged to expense.

Stock-based Compensation

We recognize the compensation cost of employee stock-based awards using the straight-line method over the requisite service period of the award, which is typically the vesting period. During the years ended December 31, 2009 and 2010 and the six months ended June 30, 2010 and 2011, we recorded approximately $100,000, $100,000, $9,000 and $106,000, respectively, of employee stock-based compensation expense. We estimate the fair value of each option award using the Black-Scholes-Merton option-pricing model.

In calculating the estimated fair value of our stock options, the Black-Scholes-Merton option-pricing model requires the consideration of the following six variables for purposes of estimating fair value:

The stock option exercise price,

The expected term of the option,

The grant date price of the Company's Common Stock, which is issuable upon exercise of the option,

The expected volatility of the Company's Common Stock,

The expected dividends on the Company's Common Stock, and

The risk-free rate for the expected option term.

The expected term of the stock options granted represents the period of time that options granted are expected to be outstanding. For options granted prior to January 1, 2008, the expected term was calculated using the "simplified" method as prescribed by the SEC's Staff Accounting Bulletin No. 107, Share-Based Payment. For options granted after January 1, 2008, we calculated the expected term using similar assumptions. The expected volatility is a measure of the amount by our stock price is expected to fluctuate during the term of the options granted. We determine the expected volatility based on a review of the historical volatility of similar publicly held companies in the biotechnology field over a period commensurate with the option's expected term. We have never declared or paid any cash dividends on our Common Stock and we do not expect to do so in the foreseeable future. Accordingly, we use an expected dividend yield of zero. The risk-free interest rate is the implied yield available on U.S. Treasury issues with a remaining life consistent with the option's expected term on the date of grant. We apply an estimated forfeiture rate to current period expense to recognize compensation expense only for those awards expected to vest. We estimate forfeitures based upon historical data, adjusted for known trends, and will adjust the estimate of forfeitures if actual forfeitures differ or are expected to differ from such estimates. Subsequent changes in estimated forfeitures are recognized through a cumulative adjustment in the period of change and also will impact the amount of stock-based compensation expense in future periods.

Table of Contents

The following table presents the grant dates and related exercise prices of stock options granted from January 1, 2009 to October 5, 2011.

Date of Issuance	Nature of Issuance	Number of Shares	Exercise or Purchase Price per Share	Per Share Estimated Fair Value of Common Stock(1)	Per Share Weighted Average Estimated Fair Value of Options(2)
April 9, 2009	Option grant	9,666	$ 1.20	$ 1.20	$ 0.70
December 2, 2009	Option grant	5,000	$ 1.20	$ 1.20	$ 0.68
October 12, 2010	Option grant	256,666	$ 1.35	$ 1.35	$ 0.76
November 30, 2010	Option grant	1,666	$ 1.35	$ 1.35	$ 0.76

(1) The per share estimated fair value of Common Stock represents the determination by our board of directors of the fair value of our Common Stock as of the date of grant, taking into account various objective and subjective factors and including the results, if applicable, of valuations of our Common Stock as discussed in the pages that follow.

(2) Our estimate of the per share weighted average fair value for stock option grants was computed based upon the Black-Scholes option-pricing model with the assumptions through December 31, 2010 as disclosed in our financial statements included elsewhere in the Registration Statement.

We have historically granted stock options at exercise prices not less than the fair value of our Common Stock as determined by our board of directors, with input from management. Our board of directors has historically determined, with input from management, the estimated fair value of our Common Stock on the date of grant based on a number of objective and subjective factors, including:

- the prices at which we sold shares of convertible Preferred Stock;
- the superior rights and preferences of securities senior to our Common Stock at the time of each grant;
- the likelihood of achieving a liquidity event such as an initial public offering or sale of our company;
- our historical operating and financial performance and the status of our research and product development efforts; and
- achievement of enterprise milestones, including our entering into collaboration and license agreements;

Our board of directors also considered valuations provided by management in determining the fair value of our Common Stock. Such valuations were prepared as of December 3, 2008, December 2, 2009, October 1, 2010, and June 30, 2011, and valued our Common Stock at $1.05, $1.20, $1.35 and $2.96 per share, respectively. The valuations have been used to estimate the fair value of our Common Stock as of each option grant date listed and in calculating stock-based compensation expense. Our board of directors has consistently used the most recent valuation provided by management for determining the fair value of our Common Stock unless a specific event occurs that necessitates an interim valuation.

The valuations were based on the guidance from the *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* that was developed by staff of the American Institute of Certified Public Accountants and a task force comprising representatives from the appraisal, preparer, public accounting, venture capital, and academic communities. The option-pricing method was selected to value Radius' Common Stock-based on our stage of development and the degree of uncertainty

Table of Contents

surrounding the future success of clinical trials for our product candidates. For the valuations prepared as of December 3, 2008, December 2, 2009 and October 1, 2010, the option-pricing method treats common stock and preferred stock as call options on the enterprise's value, with exercise prices based on the liquidation preference of the preferred stock. Under this method, the common stock has value only if the funds available for distribution to stockholders exceed the value of the liquidation preference at the time of a liquidity event (for example, merger of sale), assuming the enterprise has funds available to make a liquidation preference meaningful and collectible by the shareholders.

In the model, the exercise price is based on a comparison with the enterprise value rather than, as in the case of a "regular" call option, a comparison with a per-share stock price. Thus, common stock is considered to be a call option with a claim on the enterprise at an exercise price equal to the remaining value immediately after the preferred stock is liquidated. We used the Black-Scholes model to price the call option. Under the option-pricing method we had to consider the various terms of the stockholder agreements -including the level of seniority among the securities, dividend policy, conversion ratios, and cash allocations -upon liquidation of the enterprise.

For the valuation prepared as of June 30, 2011 we utilized the probability-weighted expected return method, or PWERM, as outlined in the AICPA Technical Practice Aid, *Valuations of Privately-Held-Company Equity Securities Issued as Compensation*, or Practice Aid, which considers the value of preferred and common stock based upon the probability-weighted present value of expected future net cash flows, considering each of the possible future events, as well as the rights and preferences of each share class. PWERM is complex as it requires numerous assumptions relating to potential future outcomes of equity, hence, the use of this method can be applied: (i) when possible future outcomes can be predicted with reasonable certainty; and (ii) when there is a complex capital structure (i.e., several classes of preferred and common stock). We also used this methodology to estimate the fair value of our preferred stock, which we used in the preferred stock extinguishment, discussed in Note 4 to our condensed quarterly financial statements for the period ended June 30, 2011, and to determine the fair value of shares of Series A-5 convertible preferred stock due to Nordic Bioscienses at June 30, 2011, as discussed in Note 14 to our condensed quarterly financial statements for the period ended June 30, 2011.

Results of Operations

The following discussion summarizes the key factors our management believes are necessary for an understanding of our financial statements.

	Years ended December 31,		Six months ended June 30,	
	2009	**2010**	**2010**	**2011**
Revenue:				
Option Fee	$ 1,616	$	$	$
Operating expenses:				
Research and development	14,519	11,692	4,706	20,689
General and administrative	2,668	3,630	1,117	1,842
Restructuring		217		
Loss from operations	(15,571)	(15,539)	(5,823)	(22,531)
Other income (expense):				
Other income (expense), net	(7)	824	(15)	22
Interest income (expense), net	489	85	47	(88)
Net loss	(15,089)	(14,630)	(5,791)	(22,597)
Net (loss) earnings attributable to common stockholders	$ (26,494)	$ (26,773)	$ (11,170)	$ 1,013

Table of Contents

Six months Ended June 30, 2011 and 2010

Revenue: There was no revenue for the six months ended June 30, 2011 or June 30, 2010.

	Six months Ended June 30,		Change	
	2010	2011	$	%
	(dollars in thousands)			
Operating expenses:				
Research and development	$ 4,706	$ 20,689	$ 15,983	340%
General and administrative	1,117	1,842	725	65%

Research and development expenses: For the six months ended June 30, 2011, research and development expense was $20,689,000 compared to $4,706,000 for the six months ended June 30, 2010, an increase of $15,983,000 and 340%. For the six months ended June 30, 2011, we incurred professional contract services associated with the development of BA058 Injection of $16,774,000 compared to $661,000 for the six months ended June 30, 2010. The increase was primarily the result of expenses incurred to initiate our Phase 3 study which began dosing of patients in April 2011. We expect this higher level of BA058 Injection expenses to be maintained or increase over the course of the Phase 3 study. However, there will be variability from quarter to quarter driven primarily by the rate of patient enrollment, the euro/dollar exchange rate, and fluctuations in the value of Radius stock issued to Nordic under the Stock Issuance Agreement. Additionally, we incurred $1,901,000 more in contract services associated with the development of BA058 Microneedle Patch in relation to the manufacture of toxicology and Phase 2 clinical supplies. Offsetting these increases, we spent $264,000 less on RAD140, and $1,040,000 less for professional contract services associated with the development of RAD1901 in the six months ended June 30, 2011 compared to the six months ended June 30, 2010. We also had reductions in facilities and outside services expenses of approximately $362,000 for the six months ended June 30, 2011 compared to the six months ended June 30, 2010. These reductions were attributable to the closure of our lab in September of 2010.

We began tracking program expenses for BA058 Injection in 2005, and program expenses from inception to June 30, 2011 were approximately $43,078,000. We began tracking program expenses for BA058 Microneedle Patch in 2007, and program expenses from inception to June 30, 2011were approximately $8,215,000. We began tracking program expenses for RAD1901 in 2006, and program expenses from inception to June 30, 2011were approximately $15,290,000. We began tracking program expenses for RAD140 in 2008, and program expenses from inception to June 30, 2011were approximately $5,164,000. These expenses relate primarily to external costs associated with manufacturing, preclinical studies and clinical trial costs.

General and administrative expense: For the six months ended June 30, 2011, general and administrative expense was $1,842,000 compared to $1,117,000 for the six months ended June 30, 2010, an increase of $725,000 and 65%. The increase is primarily the result of increased legal and accounting costs.

Restructuring: There were no restructuring charges for the six months ended June 30, 2011 and June 30, 2010.

Interest income (expense), net: For the six months ended June 30, 2011 interest expense was $108,000 compared to $0 for the six months ended June 30, 2010. Interest expense reflects interest due on our Loan and Security Agreement with Oxford Finance Group and General Electric Capital Corporation that was effective on May 23, 2011.

Table of Contents

Years ended December 31, 2010 and 2009

Revenue: For the year ended December 31, 2010, revenue was $0 compared to $1,616,000 for the year ended December 31, 2009. The revenue in 2009 relates solely to an option agreement signed with Novartis in 2007 pursuant to which Novartis obtained an option to license the exclusive worldwide rights (except Japan) to all formulations of BA058. Revenue was recognized ratably over the option period based on criteria specified in the agreement. The period of option exclusivity expired in 2009 without exercise by Novartis.

	Years Ended December 31,		Change	
	2009	2010	$	%
	(dollars in thousands)			
Operating expenses:				
Research and development	$ 14,519	$ 11,692	$ (2,827)	(19)%
General and administrative	2,668	3,630	962	36%
Restructuring		217	217	100%

Research and development expenses: For the year ended December 31, 2010, research and development expense was $11,692,000 compared to $14,519,000 for the year ended December 31, 2009, a decrease of $2,827,000 and 19%. For the year ended December 31, 2010, we incurred professional contract services associated with the development of BA058 Injection of approximately $4,664,000 compared to approximately $3,671,000 for the year ended December 31, 2009. The increase is attributable to a $1,000,000 up-front payment to Nordic for Phase 3 study expenses. Offsetting these increases, we incurred $956,000 less in contract services associated with the development of BA058 Microneedle Patch. The decrease was mainly the result of completion of the feasibility agreement with 3M for the Microneedle Patch in 2009. Additionally, we spent $1,717,000 less on RAD140 and $531,000 less on RAD1901 for professional contract services in the year ended December 31, 2010 compared to the year ended December 31, 2009 as we evaluate strategic options of the further development of these programs. Lastly, we experienced reductions in stock-based and other compensation of approximately $125,000, professional fees of approximately $234,000, and facility and other miscellaneous costs of approximately $256,000, for the year ended December 30, 2010 compared to the year ended December 31, 2009. The reduction in compensation was the result of the achievement of certain milestones that generated higher stock-based compensation in 2009. The reduction in professional fees, facilities, and miscellaneous other costs was related to the curtailment in costs for the RAD140 and RAD1901 programs.

General and administrative expenses: For the year ended December 31, 2010, general and administrative expense was $3,630,000 compared to $2,668,000 for the year ended December 31, 2009, an increase of approximately $962,000 and 36%. The increase was attributable to an increase in compensation of approximately $279,000 and professional fees of approximately $715,000. The increase in compensation consisted mainly of management bonuses which were higher in 2010 than in 2009. The increase in professional fees included legal and accounting fees. These increases were offset by reductions in other individually insignificant accounts.

Restructuring: We incurred restructuring costs of approximately $217,000 in the year ended December 31, 2010 related to lease termination costs associated with vacating our laboratory space. No similar costs were incurred in 2009.

Other income (expense), net: Other income (expense) of $824,000 at December 31, 2010 was primarily comprised of approximately $733,000 of grant proceeds from the Internal Revenue Service pursuant to the qualifying therapeutic discovery grant program and approximately $149,000 in proceeds from the sale of equipment.

Table of Contents

Interest income (expense), net: Interest income decreased approximately $404,000 from $489,000 in the year ended December 31, 2009 to $85,000 in the year ended December 31, 2010. The decrease is attributable to a lower average cash equivalents and marketable securities balance in 2010.

Liquidity and Capital resources

From inception to June 30, 2011, we have incurred an accumulated deficit of $102,481,000, primarily as a result of expenses incurred through a combination of research and development activities related to our various product candidates and expenses supporting those activities.

We have financed our operations since inception primarily through the private sale of preferred stock as well as the receipt of $5,000,000 in fees associated with an option agreement. Total cash, cash equivalents and marketable securities as of June 30, 2011 was $25,336,000.

The following table sets forth the major sources and uses of cash for each of the periods set forth below:

	Years ended December 31,		Change		Six months ended June 30,		Change	
	2009	2010	$	%	2010	2011	$	%
	(dollars in thousands)				(dollars in thousands)			
Net cash provided by (used in):								
Operating activities	$ (18,293)	$ (12,986)	$ 5,307	29%	$ (6,827)	$ (19,625)	$ (12,798)	187%
Investing activities	17,623	15,670	(1,953)	11%	11,342	7,948	(3,394)	30%
Financing activities	(8)	2	10	125%		26,431	26,431	100%
Net increase (decrease) in cash and cash equivalents	$ (678)	$ 2,686	$ 3,364	496%	$ 4,515	$ 14,754	$ 10,239	227%

Cash Flows From Operating Activities

The increase of $12,798,000 in net cash used in operations for the six months ended June 30, 2011 compared to the six months ended June 30, 2010 was primarily associated with an increase in net loss and net changes in working capital related to expenses incurred to initiate the Phase 3 clinical study for BA058 Injection. The changes in working capital included a $3,028,000 increase in prepaid expenses, a $541,000 decrease in accounts payable and a $1,507,000 increase in accrued expenses, all of which were attributable due to the timing of payments made in connection with our Phase 3 clinical study for BA058 Injections.

The decrease of $5,307,000 in net cash used in operations for the year ended December 31, 2010 compared to the year ended December 31, 2009 was primarily associated with a $459,000 decrease in net loss and net changes in working capital, including a $2,413,000 million increase in accrued expenses related to preparations to initiate the Phase 3 clinical study for BA058 Injection, a $1,027,000 decrease in accounts payable and a decrease of $1,615,000 million in deferred revenue due to the expiration of the Novartis option agreement in 2009.

Cash Flows From Investing Activities

Net cash provided by investing activities decreased by $3,394,000 for the six months ended June 30, 2011 compared to the six months ended June 30, 2010. The decrease was primarily a result of a $3,406,000 decrease in net cash proceeds from maturities of investments, net of purchases, in the six months ended June 30, 2011; offset by $12,000 less cash used for the purchase of equipment.

Table of Contents

Net cash provided by investing activities decreased by $1,953,000 for the year ended December 31, 2010 compared to the year ended December 31, 2009. The decrease was primarily a result of a $2,120,000 decrease in net cash proceeds from the sales and maturities of investments, net of purchases, in the year ended December 31, 2010; offset by $149,000 in proceeds from the sale of equipment.

Our investing cash flows will be impacted by the timing of purchases and sales of marketable securities. All of our marketable securities have contractual maturities of less than one year. Due to the short-term nature of our marketable securities, we would not expect our operational results or cash flows to be significantly affected by a change in market interest rates due to the short-term duration of our investments.

Cash Flows From Financing Activities

Cash flows from financing activities for the six months ended June 30, 2011 included $20,452,000 of proceeds, net of issuance costs, from the first closing of the Series A-1 and Series A-5 financings, $5,833,000 of proceeds, net of issuance costs, from the Loan and Security Agreement with Oxford Finance Group and General Electric Capital Corporation, and $152,000 of net proceeds from stock option exercises.

There were no significant cash flows from financing activities for the six months ended June 30, 2010 or the years ended December 31, 2010 and December 31, 2009.

Our continued operations will depend on whether we are able to raise additional funds through various potential sources, such as equity and debt financing and potential collaboration agreements. Through June 30, 2011, a significant portion of our financing has been through private placements of Preferred Stock, as well as drawings under a term loan facility. We will seek to continue to fund operations from cash on hand and through additional equity and/or debt financing and potential collaboration agreements. We can give no assurances that any additional capital that we are able to obtain will be sufficient to meet our needs. Based on our existing resources, which include the $21,428,000 of proceeds from the first closing of the Series A-1 Financing on May 17, 2011 and an irrevocable legally binding commitment effective May 11, 2011, for additional proceeds of $42,857,000 from the issuance of Series A-1 in two additional closings which are expected to take place in 2011, as well as a term loan of an aggregate principal amount of up to $25,000,000, $6,250,000 of which was drawn on May 23, 2011 and is repayable over a term of 42 months, we believe that we have sufficient capital to fund our operations into the second quarter of 2012, but will need additional financing thereafter until we can achieve profitability, if ever.

Financings

Through June 30, 2011, we received aggregate net cash proceeds of $126.3 million from the sale of shares of our preferred stock as follows:

Issue	Year	No. Shares	Net Proceeds (in thousands)
Series B redeemable convertible preferred stock	2003, 2004, 2005	1,599,997	23,775
Series C redeemable convertible preferred stock	2006, 2007, 2008	10,146,629	82,096
Series A-1 convertible preferred stock	2011	3,959,351	19,927
Series A-5 convertible preferred stock	2011	64,430	525
		15,770,407	$ 126,323

Table of Contents

On May 11, 2011 accredited investors in a Series A-1 convertible preferred stock financing ("Series A-1 Private Placement") entered into an irrevocable legally binding commitment to purchase $64.3 million of Series A-1 Preferred Stock in three closings. The first closing of the Series A-1 Private Placement occurred on May 17, 2011 and we received gross proceeds of approximately $21,428,000 through the sale of 2,631,845 shares of Series A-1 Preferred Stock. Those shares were exchanged in the Merger for an aggregate of 263,177 shares of Series A-1 Preferred Stock. Shares of the Series A-1 Preferred Stock are convertible, in whole or in part, at the option of the holder at any time into shares of our Common Stock initially on a one-for-ten basis at an initial conversion price of $8.142 per share.

The Series A-1 Private Placement provides for additional Stage II and Stage III closings upon notice by us to the same accredited investors for an additional 526,358 shares of Series A-1 Preferred Stock in consideration of gross proceeds of an additional $42,857,000. We expect to affect the Stage II and Stage III closings in 2011. Concurrently with the Stage I Closing of the Series A-1 Private Placement, we issued 64,430 shares of Series A-5 Preferred Stock to Nordic for gross proceeds of approximately $525,000. These shares were exchanged in the merger for 6,443 shares of Series A-5 convertible preferred stock.

On May 23, 2011, we entered into a Loan and Security Agreement with GECC as agent and a lender, and Oxford, as a lender, pursuant to which the Lenders agreed to make available to the Company $25,000,000 in the aggregate over three term loans. The Initial Term Loan was made on May 23, 2011 in an aggregate principal amount equal to $6,250,000 and is repayable over a term of 42 months, including a six month interest only period. The Initial Term Loan bears interest at 10%. Pursuant to the Agreement, we may request two (2) additional term loans, the first, which must be funded not later than November 23, 2011, in an aggregate principal amount equal to $6,250,000 and the second, which must be funded not later than May 23, 2012, in an aggregate principal amount equal to $12,500,000. In the event the Second Term Loan is not funded on or before November 23, 2011, the Lenders' commitment to make the Second Term Loan shall be terminated and the total commitment shall be reduced by $6,250,000. In the event the Third Term Loan is not funded on or before May 23, 2012, the Lenders' commitment to make the Third Term Loan shall be terminated and the total commitment shall be further reduced by $12,500,000. Pursuant to the agreement, we agreed to issue to the Lenders (or their respective affiliates or designees) the Warrants to purchase in the aggregate a number of shares of our Series A-1 Preferred Stock equal to the quotient of (a) the product of (i) the amount of the applicable term loan multiplied by (ii) four percent (4%) divided by (b) the exercise price equal to $81.42 per share. The exercise period of each Warrant to be issued will expire ten (10) years from the date such Warrants are issued. On May 23, 2011, the Company issued a Warrant to each of GECC and Oxford for the purchase of 3,070 shares of Series A-1 Preferred Stock.

Research and Development Agreements:

We entered into a Letter of Intent with Nordic on September 3, 2010, pursuant to which we funded preparatory work by Nordic in respect of a Phase 3 clinical study of BA058 Injection. The Letter of Intent was extended on December 15, 2010 and on January 31, 2011. On March 29, 2011, we and Nordic entered into a Clinical Trial Services Agreement, a Work Statement NB-1 (the "Work Statement") under such Clinical Trial Services Agreement and a related Stock Issuance Agreement, as amended. Pursuant to the Work Statement, Nordic is managing the Phase 3 clinical study ("Clinical Study") of BA058 Injection and Nordic will be compensated for such services in a combination of cash and shares of Series A-6 convertible preferred stock.

Pursuant to the Work Statement, we are required to make certain per patient payments denominated in both euros and U.S. dollars for each patient enrolled in the Clinical Study followed by monthly payments for the duration of the study and final payments in two equal euro-denominated installments and two equal U.S. Dollar-denominated installments. Changes to the Clinical Study schedule may alter the timing, but not the aggregate amounts, of the payments. The Work Statement

Table of Contents

provides for a total of 33,867,000 of euro-denominated payments and 4,856,000 of U.S. Dollar-denominated payments over the course of the Clinical Study.

Pursuant to the Stock Issuance Agreement, Nordic agreed to purchase the equivalent of €371,864 of Series A-5 at $8.142 per share. 64,430 shares of Series A-5 Preferred Stock were issued to Nordic on May 17, 2011, which generated proceeds of $525,000 to the Company. These shares were exchanged in the Merger for an aggregate of 6,443 shares of Series A-5 convertible preferred stock.

The Stock Issuance Agreement provides that Nordic is entitled to receive quarterly stock dividends, payable in shares of Series A-6 convertible preferred stock, having an aggregate value of up to €36,814,531 (the "Series A-5 Accruing Dividend"). This right to receive the Series A-5 Accruing Dividend is non-transferrable and will remain with Nordic in the event it sells the shares of Series A-5 preferred stock or in the event the shares of Series A-5 Preferred Stock are converted into common stock in accordance with the Company's amended certificate of incorporation. As of June 30, 2011, 57,987 shares of Series A-6 preferred stock are due to Nordic.

The Company recorded $11,356,000 in the six-month period ended June 30, 2011 reflecting costs incurred for preparatory and other start-up costs to initiate the Clinical Study in April 2011. The Company recorded an additional $453,000 of research and development expense in the six-month period ended June 30, 2011 for per-patient costs incurred for patients that had enrolled in the Clinical Study as of June 30, 2011. As of June 30, 2011, in addition to the $3,421,000 liability that is reflected in Other Liabilities on the Balance Sheet that will be settled in shares of Series A-6 Preferred Stock, as noted above, the Company has a liability to Nordic of approximately $1,594,000 that is included in accrued expenses on the Balance Sheet.

The Company is also responsible for certain pass through costs in connection with the Clinical Study. The Company recognized research and development expense of $2,361,000 for pass through costs in the six-month period ended June 30, 2011.

License Agreement Obligations

BA058

In September, 2005, we exclusively licensed the worldwide rights (except Japan) to BA058 and analogs from Ipsen. Of particular relevance, our licensed US Patent No. 5,969,095, effective filing date (3/29/1996) entitled "Analogs of Parathyroid Hormone" that claims BA058 and US Patent No. 6,544,949, effective filing date (3/29/1996) entitled "Analogs of Parathyroid Hormone" that claims methods of treating osteoporosis using BA058 and pharmaceutical compositions comprising BA058, and the corresponding foreign patents and continuing patent applications. In addition, we have rights to joint intellectual property related to BA058 including rights to the jointly derived intellectual property contained in US7803770, effective filing date (10/3/2007) and related patent applications both in the United States and worldwide (excluding Japan) that cover the method of treating osteoporosis using the phase 3 clinical dosage strength and form. In consideration for the rights to BA058 and in recognition of certain milestones having been met to date, we have paid to Ipsen an aggregate amount of $1,000,000 US dollars. The license agreement further requires us to make payments upon the achievement of certain future clinical and regulatory milestones. The range of milestone payments that could be paid under the agreement is €10,000,000 to €40,000,000. Should BA058 become commercialized, we will be obligated to pay to Ipsen an annual fixed mid-single digit royalty based on net sales of the product on a country by country basis until the later of the last to expire of the licensed patents or for a period of 10 years after the first commercial sale in such country. In the event that we sublicense BA058 to a third party, we are obligated to pay royalties to Ipsen based on a fixed rate of fees or royalties received from the sublicense. Effective May 11, 2011, Ipsen agreed to accept shares of Series A-1 Preferred Stock in lieu of a cash milestone payment. We issued 173,263 shares of Series A-1 Preferred Stock to Ipsen on May 17, 2011 to settle the liability. These shares were

Table of Contents

exchanged in the Merger for an aggregate of 17,326 shares of Series A-1 Convertible Preferred Stock. The license agreement contains other customary clauses and terms as are common in similar agreements in the industry.

RAD1901

In June, 2006, we exclusively licensed the worldwide rights (except Japan) to RAD1901 from Eisai. In consideration for the rights to BA058 and in recognition of certain milestones having been met to date, we have paid to Eisai an aggregate amount of $1,500,000 US dollars. The range of milestone payments that could be paid under the agreement is $1,000,000 to $20,000,000. The license agreement further requires Radius to make payments upon the achievement of certain future clinical and regulatory milestones. Should RAD1901 become commercialized, we will be obligated to pay to Eisai an annual royalty in a variable mid-single digit range based on net sales of the product on a country by country basis for a period that expires on the later of (i) date the last remaining valid claim in the licensed patents expires, lapses or is invalidated in that country, the Product is not covered by data protection clauses, and the sales of lawful generic version of the Product account for more than a specified percentage of the total sales of all pharmaceutical products containing the licensed compound in that country; or (ii) a period of 10 years after the first commercial sale of the licensed products in such country unless it is sooner terminated. In the event that we sublicense RAD1901 to a third party, we are obligated to pay royalties to Eisai based on a fixed rate of fees or royalties received from the sublicense. The royalty rate shall then be subject to reduction and the royalty obligation will expire at such time as sales of lawful generic version of such product account for more than a specified minimum percentage of the total sales of all products that contain the licensed compound. We were also granted the right to sublicense with prior written approval from Eisai, but subject to a right of first negotiation held by Eisai if we seek to grant sublicenses limited to particular Asian countries. If we sublicense the licensed technology to a third party, we will be obligated to pay Eisai, in addition to the milestones referenced above, a percentage of certain fees it receives from such sublicensee and royalties in the low single digit range based on net sales of the sublicense. The license agreement contains other customary clauses and terms as are common in similar agreements in the industry.

Net Operating Loss Carryforwards

As of December 31, 2010, we had federal and state net operating loss carryforwards of approximately $85,000,000 and $75,000,000, respectively. If not utilized, the net operating loss carryforwards will begin expiring in 2024 and 2016 for federal and state purposes, respectively.

Under Section 382 of the Code, substantial changes in our ownership may limit the amount of net operating loss carryforwards that could be utilized annually in the future to offset taxable income. Specifically, this limitation may arise in the event of a cumulative change in ownership of our company of more than 50% within a three-year period. Any such annual limitation may significantly reduce the utilization of the net operating loss carryforwards before they expire. The closing of this offering, together with private placements and other transactions that have occurred since our inception, may trigger an ownership change pursuant to Section 382, which could limit the amount of net operating loss carryforwards that could be utilized annually in the future to offset taxable income, if any. Any such limitation, whether as the result of this offering, prior private placements, sales of Common Stock by our existing stockholders or additional sales of Common Stock by us after this offering, could have a material adverse effect on our results of operations in future years. We have not completed a study to assess whether an ownership change has occurred, or whether there have been multiple ownership changes since our inception, due to the significant costs and complexities associated with such study. In each period since our inception, we have recorded a valuation allowance for the full amount of our deferred tax asset, as the realization of the deferred tax asset is uncertain. As a result, we have not recorded any federal or state income tax benefit in our statement of operations.

Table of Contents

Internal Control Over Financial Reporting

We are not currently required to comply with Section 404 of the Sarbanes-Oxley Act and are therefore not required to make an assessment of the effectiveness of our internal control over financial reporting. Further, our independent registered public accounting firm has not been engaged to express, nor have they expressed, an opinion on the effectiveness of our internal control over financial reporting. In connection with our becoming a public company, we intend to hire additional accounting personnel with public company and SEC reporting experience and to focus on implementing appropriate internal controls and other procedures.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

In connection with the closing of the Merger on May 17, 2011, Ernst & Young LLP ("E&Y"), who was the independent registered public accounting firm for the Former Operating Company prior to the Merger, became the independent registered public accounting firm for the Company and Raich Ende Malter & Co. LLP ("REMC") was dismissed as the independent registered public accountant for the Company. The decision to appoint E&Y and dismiss REMC was recommended, and subsequently approved, by the Board of Directors of the Company.

The reports of REMC on the Company's financial statements for the two years ended December 31, 2009 and December 31, 2010 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to audit scope or accounting principles.

In connection with the audits of the Company's financial statements for each of the two years ended December 31, 2010, and in the subsequent interim period through REMC's dismissal, there were no disagreements with REMC on any matters of accounting principles or practices, financial statement disclosures, or auditing scope or procedures, which if not resolved to REMC's satisfaction would have caused REMC to make reference to the matter in their report.

In connection with the audited financial statements of the Company through REMC's dismissal, there have been no reportable events with the Company as set forth in Item 304(a)(1)(v) of Regulation S-K.

The Company has requested that REMC furnish it with a letter addressed to the Securities & Exchange Commission stating whether it agrees with the above statements. A copy of the letter, dated September 28, 2011 has been filed with this report.

Quantitative and Qualitative Disclosures about Market Risk

Our primary exposure to market risk is foreign currency exposure. A substantial portion of our BA058 development costs are denominated in euro and an immediate 10 percent adverse change in the dollar/euro exchange rate will result in increased costs and would have a material adverse impact on our financial statements and require us to raise additional capital to complete the development of our products. We do not hedge our foreign currency exchange rate risk.

We are also exposed to market risk related to changes in interest rates. As of December 31, 2010 and December 31, 2009, we had cash, cash equivalents and short-term investments of $18,551,000 and $31,722,000 million, respectively, consisting of money market funds, U.S. Treasuries, Certificates of Deposit and cash equivalents. This exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term marketable securities. Our short-term investments are subject to interest rate risk and will fall in value if market interest rates increase. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 10 percent change in interest rates would not have a material effect on the fair market value of our portfolio. We have the ability to hold our short-investments until maturity, and therefore we would not expect our operations results or cash

Table of Contents

flows to be affected by any significant degree by the effect of a change in market interest rates on our investments. We carry our investments based on publicly available information. We do not currently have any hard to value investment securities or securities for which a market is not readily available or active.

In addition, the amounts outstanding under Initial Term Loan from GECC and Oxford are fixed at an annual interest rate of 10%. The Loan and Security Agreement entered into with GECC and Oxford in May of 2011 allows for additional borrowings in the form of two additional term loans. In the event, we enter into the additional term loans, the interest rate will be the greater of (i) 10% or (ii) the sum of (a) the three year Treasury Rate as published the Board of Governors of the Federal Reserve System in Federal Reserve Statistical Release H.15 entitled "Selected Interest Rates", plus (b) 9.19%. In the event we make additional borrowings under the Loan and Security Agreement, changes in the three year Treasury Rate may increase the interest rates we would pay on such term loans and increase our cost of capital which may have a significant impact to our financial condition.

We are not subject to significant credit risk as this risk does not have the potential to materially impact the value of assets and liabilities.

Table of Contents

MANAGEMENT

Each executive officer and each member of our board of directors shall serve until his successor is elected and qualified.

Name	Age	Position
C. Richard Lyttle, Ph.D.	66	Director, President and Chief Executive Officer
Nick Harvey	51	Senior Vice President, Chief Financial Officer, Treasurer and Secretary
Louis O'Dea, MB	60	Senior Vice President, Chief Medical Officer
Gary Hattersley, Ph.D.	45	Vice President, Biology
Alan Auerbach	42	Director
Jonathan Fleming	54	Director
Ansbert K. Gadicke, M.D.	53	Director
Kurt Graves	43	Director
Martin Muenchbach, Ph.D.	40	Director
Elizabeth Stoner, M.D.	61	Director

C. Richard Lyttle, PhD., Director, President and Chief Executive Officer, 66, has served as a member of our board of directors and as our President and Chief Executive Officer since November 2010. Prior to the Merger and Short-Form Merger, Dr. Lyttle had been President and Chief Executive Officer and a Director of the Former Operating Company since August 2004. Dr. Lyttle is the former Vice President of Discovery for Women's Health and Bone from 1998 to 2004, and the Women's Health Research Institute at Wyeth from 1993 to 2004. Prior to joining Wyeth, Dr. Lyttle was Research Professor of Obstetrics, Gynecology, and Pharmacology at the University of Pennsylvania from 1979 to 1993. He received a PhD in Biochemistry from Queen's University, Kingston, Ontario in 1972, followed by postdoctoral research at the Population Council at the Rockefeller University from 1973 to 1974, the Department of Biology at Queen's University from 1974 to 1976, and at the University of Chicago from 1976 to 1979. Dr. Lyttle was selected as a director because of his business and professional experience.

Nick Harvey, Senior Vice President, Chief Financial Officer, Treasurer and Secretary, 51, has served as our Chief Financial Officer, Treasurer and Secretary since November 2010, and served as a member of our board of directors from November 2010 until the consummation of the Merger in May 2011. Prior to the Merger, Mr. Harvey had served as Chief Financial Officer and Senior Vice President of the Former Operating Company since December 2006. Prior to joining the Former Operating Company, Mr. Harvey served as Managing Director of Shiprock Capital, LLC, a venture capital firm, from 2003 to 2006 and remains a member of the Board of that firm. Prior to Shiprock Capital, Mr. Harvey served as Chief Financial Officer of a number of venture-backed companies over a 10-year period, including LifetecNet from 2001 to 2002, Transfusion Technologies from 1999 to 2000, and Transcend Therapeutics from 1993 to 1999. Mr. Harvey received a Bachelor of Economics degree in 1980 and a Bachelor of Laws degree with first-class honors in 1983 from the Australian National University, and an MBA from the Harvard Business School in 1991. Mr. Harvey was selected as a director because of his business and professional experience.

Louis O'Dea, M.B., Senior Vice President, Chief Medical Officer, 60, has been Senior Vice President and Chief Medical Officer since the closing of the Merger in May 2011 and, prior to the Merger served in such capacity at the Former Operating Company since March 2006. Prior to joining the Former Operating Company, Dr O'Dea was Vice President and Head of Clinical Development for Reproductive Endocrinology and Metabolism at Serono, Inc. from 2004 to 2006. Joining Serono as a Medical Director in 1993 (1993-95), he was appointed Executive Medical Director in 1995 (1995-1998) and Vice President for Clinical Development in 1999 (1999-2006). From 2000 to 2002, Dr O'Dea served as Regional Medical Officer in Japan. Dr. O'Dea received his Medical Degree from University College Dublin, Ireland, in 1976. He received his postgraduate medical education in Internal Medicine and

Table of Contents

Endocrinology at McGill University, Canada from 1976-84 and is board certified in both specialties in Canada and USA. From 1984-88, Dr O'Dea undertook a Research and Clinical Fellowship in Reproductive Endocrinology at Massachusetts General Hospital, Harvard University and from 1988-95 was a member of the Medical Faculty of McGill University, Montreal, Canada, in the Departments of Medicine and Obstetrics-Gynecology. Dr O'Dea has also served on the Board of Directors of the Eliassen Group from 2007 to 2010 and is an advisor to Lineage Capital.

Gary Hattersley, PhD., Vice President, Biology, 45, has served as our Vice President of Biology since the closing of the Merger in May 2011 and had served in the same capacity at the Former Operating Company since April 2008. He also served as the Former Operating Company's Director, Disease Biology & Pharmacology from 2003 to 2008. Prior to joining the Former Operating Company, Dr. Hattersley was a Senior Scientist at Millennium Pharmaceuticals from 2000 to 2003 with responsibility for the discovery and development of novel small-molecule agents for the treatment of osteoporosis and other metabolic bone diseases. Dr. Hattersley also held positions at Genetics Institute/Wyeth Research from 1992 to 2000 investigating the application of the bone morphogenetic proteins in bone and connective tissue repair and regeneration. Dr. Hattersley received a PhD in Experimental Pathology from St. George's Hospital Medical School in London in 1991.

Alan H. Auerbach, 42, has been a director since the closing of the Merger in May 2011 and, prior to the Merger, was a director of the Former Operating Company since October 2010. Mr. Auerbach is currently the Founder, Chief Executive Officer and President of Puma Biotechnology, Inc., a company dedicated to in-licensing and developing drugs for the treatment of cancer and founded in 2010. Mr. Auerbach founded Cougar Biotechnology in May 2003 and served as the company's Chief Executive Officer, President and a Member of its Board of Directors until July 2009 when Cougar was acquired by Johnson & Johnson for approximately $1 billion. From July 2009 until January 2010, Mr. Auerbach served as the Co-Chairman of the Integration Steering Committee at Cougar (as part of Johnson & Johnson) that provided leadership and oversight for the development and global commercialization of Cougar's lead product candidate, abiraterone acetate, for the treatment of advanced prostate cancer. Prior to founding Cougar, from June 1998 to April 2003, Mr. Auerbach was a Vice President, Senior Research Analyst at Wells Fargo Securities, where he was responsible for research coverage of small- and middle- capitalization biotechnology companies, with a focus on companies in the field of oncology. He had primary responsibility for technical, scientific and clinical due diligence, as well as selection of biotechnology companies followed by the company. During 2002, Mr. Auerbach ranked second in the NASDAQ/Starmine survey of analyst performance for stock picking in biotechnology. From August 1997 to May 1998, Mr. Auerbach was a Vice President, Research Analyst at the Seidler Companies, Inc., where he was responsible for research coverage of small capitalization biotechnology companies. Prior to his work as a biotechnology analyst, Mr. Auerbach worked for Diagnostic Products Corporation, where he designed and implemented clinical trials in the field of oncology. Mr. Auerbach received a B.S. in Biomedical Engineering from Boston University and an M.S. in Biomedical Engineering from the University of Southern California. Mr. Auerbach was selected as a director because of his business and professional experience, including but not limited to his leadership of Cougar Biotechnology in drug development, private and public financings and a successful sale of the business.

Jonathan Fleming, 54, has been a director since the closing of the Merger in May 2011 and, prior to the Merger, was as director of the Former Operating Company since March 2009. Mr. Fleming is the Managing General Partner of Oxford Bioscience Partners ("OBP"), an international venture capital firm specializing in life science technology-based investments, which he joined in August 1996 as a General Partner, with offices in Boston and Connecticut. Mr. Fleming has been in the investment business for more than 20 years and has launched and financed growth companies in the United States, Europe, and Israel. Prior to joining OBP in 1996, Mr. Fleming was a Founding General Partner of MVP Ventures in Boston from 1988 to 1996. He began his investment career with TVM Techno

Table of Contents

Venture Management in Munich, Germany in 1985. Mr. Fleming is also a co-founder of Medica Venture Partners, a venture capital investment firm specializing in early-stage healthcare and biotechnology companies in Israel. Mr. Fleming has been on the Board of Asterand plc (LSE: ATD) since September 2008 and is a director of several private companies including Leerink Swann, a Boston-based investment bank specializing in healthcare companies since June 1998, Laboratory Partners, a clinical diagnostic testing company, since June 2006, and Railrunner, a rail products and services company, since June 1999. Mr. Fleming is a Trustee of the Museum of Science in Boston, a Member of the Board of the New England Healthcare Institute, and a Senior Lecturer at the MIT Sloan School of Business. He holds an MPA from Princeton University and a BA from the University of California, Berkeley. Mr. Fleming brings to our board of directors strategic insight and experience with his long career in venture capital and investing in life sciences technology-based firms for over 20 years.

Ansbert K. Gadicke, M.D., 53, has been a director since the closing of the Merger and, prior to the Merger, served a director of the Former Operating Company since November 2003. Dr. Gadicke is a Co-Founder and Managing Director of MPM Capital since August 1996 to date. He led MPM's effort to build its Advisory and Investment Banking business from 1992 to 1996 and started its Asset Management business in 1996. Prior to founding MPM, Dr. Gadicke was employed by The Boston Consulting Group from 1989 to 1992. Dr. Gadicke received an M.D. from J.W. Goethe University in Frankfurt in 1983. He subsequently held research positions in biochemistry and molecular biology at the German Cancer Research Center from 1984 to 1986, Harvard University from 1987 to 1988, and the Whitehead Institute at MIT from 1988 to 1989. He has published in leading scientific publications including Nature and Cell. Dr. Gadicke is also a director of Cerimon Pharmaceuticals; Dragonfly Sciences; Solasia Pharma K.K., Tokyo; and Verastem, Inc. He previously served as a director of Arriva Pharmaceuticals, BioMarin, Biovitrum, Chiasma, Coelacanth, Idenix, Kourion, MediGene, Omrix Biopharmaceuticals, Pharmasset, Inc.; PharmAthene, Transform, Xanodyne Pharmaceuticals, and ViaCell. He is a member of the Board of Fellows of Harvard Medical School. Dr. Gadicke was selected as a director because of his business and professional experience.

Kurt Graves, 43, has been a director since the closing of the Merger in May 2011. Mr. Graves is a global industry leader with more than twenty years of US and global general management experience in top-tier U.S. and Europe-based pharmaceutical and biotechnology companies. Since October 2009, he has been an independent consultant and since August and November of 2010, he has been serving as the Executive Chairman of two private late stage Biotech companies in type 2 diabetes and HCV, Intarcia Therapeutics and Biolex Therapeutics, respectively. Prior to this, he served as an Executive Vice President, Chief Commercial Officer and Head of Strategic Development at Vertex Pharmaceuticals Inc. from July 2007 to October 2009 where he led the development of the company's HCV and CF programs as well as the acquisition of Virochem Pharmaceuticals. Prior to joining Vertex, Mr. Graves held various leadership positions at Novartis Pharmaceuticals from 1999 to June 2007, including a member of the Executive Committee and the Global Head of the General Medicines Business, a $15 billion dollar business with 8 therapeutic area franchises. He was also the first Chief Marketing Officer for the Pharmaceuticals division from September 2003 to June 2007. Prior to that, Mr. Graves served as Senior Vice President & General Manager, US Pharma & Commercial Operations; Vice President, Head of US Marketing & Primary Care Franchises; and Vice President & Business Unit Head: Respiratory, GI, Dermatology and Bone Franchises at Novartis. Prior to joining Novartis, Mr. Graves held various commercial and general management positions since 1990 at Merck and Astra/Merck Pharmaceuticals including US GI Business Unit Head where he was responsible for developing and commercializing for Prilosec(R) and Nexium(R) and the Prilosec OTC alliance with P&G. He has also been a director of Pulmatrix Therapeutics, Alevium Pharmaceuticals, and Springleaf Therapeutics since 2010 as well. Mr. Graves earned his B.S. in Biology from Hillsdale College and has attended numerous executive leadership programs at Harvard, Wharton, and University of Michigan. Mr. Graves was selected as a director because of his business and professional experience.

Table of Contents

Martin Muenchbach, PhD., 40, has been a director since the closing of the Merger in May 2011 and prior to the Merger, he served as an observer to the Board of Directors of the Former Operating Company since February 2007. Mr. Muenchbach launched BB BIOTECH VENTURES II in, and has managed it since, 2004. Previously, he was Partner at BioMedinvest and Investment Advisor at HBM Partners. At BioMedinvest, from 2003 to 2004, he led several of the firm's investments, and served on the board of portfolio companies. Before the merger of HBM Bioventures and NMT New Medical Technologies, he was Investment Manager at NMT from 1999 to 2003, where he was focusing on international private equity investments in biopharmaceutical and biotechnological companies. Before becoming a venture capitalist, from Dr. Münchbach gained experience in strategic marketing at Sanofi-Synthelabo. Dr. Münchbach holds a Ph.D. in Protein Chemistry, a MSc in Biochemistry and a Master in Industrial Engineering and Management from the Swiss Federal Institute of Technology (ETH), Zurich. Dr. Münchbach's current board assignments include BioVascular Inc, Molecular Partners AG, Optimer Pharmaceuticals Inc, and Tioga Pharmaceuticals Inc. Dr. Münchbach was selected as a director because of his business and professional experience.

Elizabeth Stoner, M.D., 61, has been a director since the closing of the Merger in May 2011. Dr. Stoner is a Managing Director at MPM Capital from October 2007 to date and is based at the Boston office. Dr. Stoner is also the Chief Development Officer of Rhythm Pharmaceuticals. She is an industry veteran with broad expertise in clinical research and pharmaceutical product development. Dr. Stoner joined MPM Capital following a 22 year career at Merck Research Laboratories where she started in 1985. At the time of her retirement from Merck in 2007, she served as a Senior Vice President of Global Clinical Development Operations with responsibility for the Merck's clinical development activities in more than 40 countries. Dr. Stoner also oversaw the clinical development activities of Merck's Japanese partner, Banyu, led the clinical development for the Merck/Schering-Plough Joint Venture for Zetia/Vytorin, and played a critical leadership role in Merck's efforts to transform its worldwide clinical development operations. Earlier in her career at Merck, she had led the Proscar clinical development program from inception to establishing Merck as a leader in the field of prostate disease. As the Endocrine Therapeutic Head, Dr. Stoner's responsibilities included all steroid and lipid metabolism, as well as the growth hormone secretagogue clinical research programs. Prior to her position at Merck, she served as an Assistant Professor of Pediatrics at Cornell University Medical College from 1982 to 1985. She has been a director of Momenta Pharmaceuticals Inc. since October 25, 2007. She also served as director for Metabasis Pharmaceuticals. Dr. Stoner is a Member of the Scientific Advisory Board at Solasia, Inc. She received an M.D. from Albert Einstein College of Medicine, an M.S. in Chemistry from the State University of New York at Stony Brook, and a B.S. in Chemistry from Ottawa University, Kansas. Dr. Stoner was selected as a director because of her knowledge and expertise in the development of pharmaceutical products.

Terms of Office; Voting Arrangements as to Directors

Our directors and officers have been appointed for a one-year term or until their respective successors are duly elected and qualified or until their earlier resignation or removal in accordance with our By-Laws.

Pursuant to a stockholders' agreement and our Certificate of Incorporation:

(i) for so long as any shares of Series A-1 Stock are outstanding, the holders of a majority of the shares of Series A-1 Stock outstanding, voting as a separate class, shall have the right to elect two (2) members of the Board of Directors; and

(ii) Oxford Bioscience Partners IV L.P. (together with Saints Capital VI, L.P. and their respective affiliates and certain transferees), HealthCare Ventures VII, L.P. (together with its affiliates and certain transferees) and The Wellcome Trust Limited as trustee of The Wellcome Trust (together with its affiliates and certain transferees) (collectively, the "G3 Holders" and

Table of Contents

individually, each a "Group") voting as a separate class shall have the right to elect one (1) member of the Board of Directors of the Corporation by majority vote of the shares of Series A-1 Stock held by them; provided, however, that in order to be eligible to vote or consent with respect to the election of such member of the Board of Directors, a G3 Holder together with members of such G3 Holders' Group must hold greater than twenty percent (20%) of the shares of Series A-1 Stock purchased under the Series A-1 Stock Purchase Agreement by such G3 Holder and the members of such G3 Holders' Group; and

(iii) MPM Capital L.P., voting as a separate class, shall have the right to elect one (1) member of the Board of Directors of the Corporation by majority vote of the shares of Series A-1 Stock held by MPM Capital L.P.; provided that such member of the Board of Directors shall be an individual with particular expertise in the development of pharmaceutical products; and, provided, further, that in order to be eligible to vote or consent with respect to the election of such member of the Board of Directors, MPM Capital L.P. together with members of the MPM Group (as defined in the Stockholders' Agreement) must hold greater than twenty percent (20%) of the shares of Series A-1 Stock purchased under the Series A-1 Stock Purchase Agreement by MPM Capital L.P. and the members of the MPM Group.

As part of the Amended and Restated Stockholders' Agreement, dated May 17, 2011, by and among the Company, as successor to Radius Health, Inc., and the Stockholders listed therein (the "Stockholders' Agreement"), which is filed as an exhibit to this Registration Statement of which this prospectus is a part, certain of the stockholders will agree to vote in favor of all nominations pursuant to the foregoing.

Certain Relationships and Transactions

Significant Employees

As of the date hereof, we have no significant employees, other than the Company's named executive officers.

Family Relationships

There are no family relationships among our directors or executive officers.

Involvement in Certain Legal Proceedings

To our knowledge, there have been no events under any bankruptcy act, no criminal proceedings and no Federal or State judicial or administrative orders, judgments, decrees or findings, no violations of any Federal or State securities law, and no violations of any Federal commodities law material to the evaluation of the ability and integrity of any director (existing or proposed), executive officer (existing or proposed), promoter or control person of the Company during the past ten (10) years.

Transactions with Related Persons

Since October 2010 until the closing of the Merger and Short-Form Merger, the Former Operating Company funded our ongoing Exchange Act filing requirements and other costs associated with investigating and analyzing an acquisition. Management estimates such amounts to be de minimus. We have utilized the office space and equipment of MPM Asset Management LLC, our sole stockholder prior to the Redemption completed in connection with the Merger and those of the Former Operating Company from time to time, in all cases, at no cost to us.

As described above, Dr. Lyttle, a current director and executive officer was the President and Chief Executive Officer of the Former Operating Company prior to the Merger, and each of Dr. Lyttle, Mr. Auerbach, Dr. Gadicke, and Mr. Fleming, each directors, served as directors of the Former

Table of Contents

Operating Company prior to the Merger. In addition, certain investment funds affiliated with MPM Asset Management LLC (the sole stockholder of the Company prior to the Merger), MPM BioVentures III Fund, was an investor in the Former Operating Company prior to the Merger. Dr. Gadicke, the Managing Director of MPM Capital was a control person of the Company prior to the Merger and affiliated with major stockholders of the the Former Operating Company prior to the Merger. The shares held by MPM Asset Management LLC were repurchased by the Company for an aggregate purchase price of $50,000 plus reimbursement of certain costs for prior audit and legal fees, SEC filing fees, taxes and postage in the aggregate amount of $110,724.81 contemporaneously with the closing of the Merger.

Policies and Procedures for Review, Approval or Ratification of Transactions with Related Persons

We do not have any special committee, policy or procedure related to the review, approval or ratification of related party transactions, other than as required by the Delaware General Corporation Law.

Director Independence

Our Board is comprised of seven directors. Our securities are not listed on a national securities exchange or on any inter-dealer quotation system which has a requirement that directors be independent. We evaluate independence by the standards for director independence established by applicable laws, rules, and listing standards, including, without limitation, the standards for independent directors established by the New York Stock Exchange, Inc., the NASDAQ National Market, and the Securities and Exchange Commission.

Subject to some exceptions, these standards generally provide that a director will not be independent if (a) the director is, or in the past three years has been, an employee of ours; (b) a member of the director's immediate family is, or in the past three years has been, an executive officer of ours; (c) the director or a member of the director's immediate family has received more than $120,000 per year in direct compensation from us other than for service as a director (or for a family member, as a non-executive employee); (d) the director or a member of the director's immediate family is, or in the past three years has been, employed in a professional capacity by our independent public accountants, or has worked for such firm in any capacity on our audit; (e) the director or a member of the director's immediate family is, or in the past three years has been, employed as an executive officer of a company where one of our executive officers serves on the compensation committee; or (f) the director or a member of the director's immediate family is an executive officer of a company that makes payments to, or receives payments from, us in an amount which, in any twelve-month period during the past three years, exceeds the greater of $1,000,000 or two percent of that other company's consolidated gross revenues.

Of our seven directors, each of Alan Auerbach, Jonathan Fleming, Ansbert K. Gadicke, M.D., Kurt Graves, Martin Muenchbach, Ph.D. and Elizabeth Stoner, M.D. qualify as independent directors under the foregoing standard.

Board of Directors' Meetings

During the fiscal year ended December 31, 2010, our board of directors did not meet. We did not hold an annual meeting in 2010. Our board of directors conducted all of its business and approved all corporate action during the fiscal year ended December 31, 2010 by the unanimous written consent of its members, in the absence of formal board meetings.

Table of Contents

Committees of the Board of Directors

The Board has a separately designated Audit Committee established in accordance with the Securities Exchange Act of 1934, as well as a standing Nominating and Corporate Governance Committee and Compensation Committee. The table below provides membership information for the Board and each committee as of the date of this Registration Statement. We have not adopted any procedures by which security holders may recommend nominees to our board of directors. We do not have a diversity policy. We do not have a qualified financial expert at this time because we have not been able to hire a qualified candidate. Further, we believe that we have inadequate financial resources at this time to hire such an expert. We intend to continue to search for a qualified individual for hire.

	Audit	Nominating and Corporate Governance	Compensation
Independent Directors			
Alan Auerbach		X	X
Jonathan Fleming	X		
Ansbert Gadicke		X	X
Kurt Graves		X	X
Martin Muenchbach	X		
Elizabeth Stoner			
Inside Directors			
Dr. Richard Lyttle			

Audit Committee

The Audit Committee's responsibilities include:

- appointing, retaining, approving the compensation of and assessing the independence of our registered public accounting firm, including pre-approval of all services performed by our registered public accounting firm;
- overseeing the work of our registered public accounting firm, including the receipt and consideration of certain reports from the firm;
- reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- establishing procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our registered public accounting firm and management; and
- preparing the audit committee report required by SEC rules.

The members of the Audit Committee are Jonathan Fleming and Martin Muenchbach.

Compensation Committee

The Compensation Committee's responsibilities include:

reviewing and approving corporate goals and objectives relevant to chief executive officer compensation and the compensation structure for our officers;

Table of Contents

approving the chief executive officer's compensation;

reviewing and approving, or making recommendations to the board of directors with respect to, the compensation of our other executive officers; and

overseeing and administering our equity incentive plans.

The members of the Compensation Committee are Alan Auerbach, Ansbert Gadicke and Kurt Graves.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee's responsibilities include:

identifying individuals qualified to become directors;

recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;

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

developing and recommending to the board corporate governance principles; and

overseeing an annual evaluation of the board.

The members of the Nominating and Corporate Governance Committee are Alan Auerbach, Ansbert Gadicke and Kurt Graves.

From time to time, the board may establish other committees to facilitate the management of our business.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors and officers, and persons who beneficially own more than ten percent (10%) of the Company's Common Stock (collectively, the "Reporting Persons"), to file reports with the SEC of beneficial ownership and reports of changes in beneficial ownership of Common Stock on Forms 3, 4 and 5. Reporting Persons are required by applicable SEC rules to furnish us with copies of all such forms filed with the SEC pursuant to Section 16(a) of the Exchange Act. To our knowledge, based solely on our review of the copies of the Forms 3, 4 and 5 received by it during the fiscal year ended December 31, 2010, the Company believes that all reports required to be filed by such persons with respect to the Company's fiscal year ended December 31, 2010 were timely filed, except the following reports: (a) Form 3 filed by C. Richard Lyttle on April 29, 2011; and (b) Form 3 filed by Nicholas Harvey on April 29, 2011.

Code of Ethics

We have not adopted a Code of Business Conduct and Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions in that our officers and directors serve in these capacities.

Board Leadership Structure and Role on Risk Oversight

Dr. C. Richard Lyttle currently serves as our Chief Executive Officer, President and Director, and Nick Harvey currently serves as our Chief Financial Officer, Treasurer, and Secretary. At present, we have determined this leadership structure, together with the rest of our board of directors, is appropriate due to our small size and limited operations and resources. Our current directors are exclusively involved in the general

oversight of risks that could affect our business. The proposed

Table of Contents

directors will continue to evaluate our leadership structure and modify such structure as appropriate based on our size, resources, and operations.

Indemnification of Directors and Officers

Section 145 of the DGCL permits indemnification of officers, directors and other corporate agents under certain circumstances and subject to certain limitations. Articles 7 and 8 of our certificate of incorporation provides that we will indemnify, to the fullest extent permitted by Section 145 of the DGCL, as amended from time to time, each person that such section grants the Corporation power to indemnify, including in circumstances in which indemnification is otherwise discretionary under Delaware law. In addition, we have entered into separate indemnification agreements with our directors and executive officers which would require us, among other things, to indemnify them against certain liabilities which may arise by reason of their status or service (other than liabilities arising from willful misconduct of a culpable nature). The indemnification provisions in our certificate of incorporation and the indemnification agreements between us and our directors and executive officers may be sufficiently broad to permit indemnification of our directors and executive officers for liabilities (including reimbursement of expenses incurred) arising under the Securities Act. We also intend to maintain director and officer liability insurance, if available on reasonable terms, to insure our directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances.

Legal Proceedings

We are not aware of any legal proceedings in which any director, officer, or record or beneficial owner of 5% or more of our outstanding capital stock is a party adverse to us or has a material interest adverse to us, or an affiliate of such persons.

Stockholder Communication with the Board of Directors

Stockholders may send communications to our board of directors by writing to the Company, c/o Radius Health, Inc., 201 Broadway, 6th Fl., Cambridge, MA, 02116 Attention: Board of Directors.

Executive and Director Compensation

The following tables summarize all compensation earned by or paid to our Chief Executive and Financial Officer (Principal Executive and Financial Officer) and other named executive officers during the two fiscal years ended December 31, 2010 and 2009. We have not had any formal policy for determining the compensation of executive officers.

Table of Contents

SUMMARY COMPENSATION TABLE

By Us Prior to the Merger

Prior to the Merger, we had not issued any stock options or maintained any stock option or other equity incentive plans. Prior to the Merger, we had no plans in place and never maintained any plans that provided for the payment of retirement benefits or benefits that will be paid primarily following retirement including, but not limited to, tax qualified deferred benefit plans, supplemental executive retirement plans, tax-qualified deferred contribution plans and nonqualified deferred contribution plans. Similarly, we had no contracts, agreements, plans or arrangements, whether written or unwritten, that provide for payments to any named executive officers or any other persons following, or in connection with the resignation, retirement or other termination of a named executive officer, or a change in control of us or a change in a named executive officer's responsibilities following a change in control. The following table summarizes all compensation earned by or paid to Chief Executive Officer and Financial Officer during two fiscal years ended December 31, 2010 and 2009

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	Non-qualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
Steven St. Peter,	2010(1)	0	0	0	0	0	0	0	0
President, Director, Principal Executive Officer and Principal Financial Officer	2009	0	0	0	0	0	0	0	0
John Vander Vort,	2010(1)	0	0	0	0	0	0	0	0
Secretary and Director	2009	0	0	0	0	0	0	0	0
Richard Lyttle,	2010(2)	0	0	0	0	0	0	0	0
President, Director, Principal Executive Officer	2009	0	0	0	0	0	0	0	0
Nick Harvey,	2010(2)	0	0	0	0	0	0	0	0
Senior Vice President, Director Principal Financial Officer, Treasurer and Secretary	2009	0	0	0	0	0	0	0	0

Notes:

(1) Resigned in November 2010.

(2) Appointed in November 2010.

Table of Contents

By the Former Operating Company Prior to the Merger

The following tables summarize all compensation earned by or paid to the Former Operating Company's Chief Executive and Financial Officer (Principal Executive and Financial Officer) and other named executive officers during the two fiscal years ended December 31, 2010 and 2009. The Former Operating Company did not have any formal policy for determining the compensation of executive officers. Instead, base salaries for our named executive officers typically are established through arm's length negotiation at the time the executive is hired. On an annual basis, our board of directors reviews and evaluates, with input from our President and Chief Executive Officer, the need for adjustment of the base salaries of our executives based on changes and expected changes in the scope of an executive's responsibilities, including promotions, the individual contributions made by and performance of the executive during the prior fiscal year, the executive's performance over a period of years, overall labor market conditions, the relative ease or difficulty of replacing the executive with a well-qualified person, our overall growth and development as a company and general salary trends in our industry.

Each executive officer is eligible to receive an annual performance-based cash bonus, in an amount up to a fixed percentage of his base salary. At the beginning of each year the board develops with input from our President and Chief Executive Officer a list of corporate goals for the year that would be used as a guideline to assess the annual performance of the executive officers. As soon as practical after the year is completed, the board would review actual performance against the stated goals and determine subjectively what it believes to be the appropriate level of cash bonus. Whether or not a cash bonus is paid is entirely at the discretion of the board of directors.

As a public operating company, we intend to create a compensation committee that will be charged with developing a formal policy for determining and reviewing the compensation of executive officers on a regular basis.

Name and Principal Position	Year	Salary ($)	Bonus ($)(1)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	Non-qualified Deferred Compensation Earnings ($)	All Other Compensation ($)(2)	Total ($)
Richard Lyttle,	2010	378,622	189,311	0	0	0	0	1715	569,648
President, Director, and Chief Executive Officer	2009	369,387	73,877	0	0	0	0	1,584	444,848
Nick Harvey,	2010	278,492	105,827	0	0	0	0	1,305	385,624
Treasurer, Secretary and Chief Fianncial Officer and Director	2009	271,700	40,755	0	0	0	0	851	313,306
Louis O'Dea,	2010	319,363	130,939	0	0	0	0	1,032	451,334
Sr. Vice-President and Chief Medical Officer	2009	311,574	51,410	0	0	0	0	105	363,089
Gary Hattersley,	2010	223,860	69,397	0	0	0	0	240	293,497
Vice President, Biology & Pharmacology	2009	218,400	27,300	0	0	0	0	240	245,940

Notes:

(1) Bonuses related to prior years are shown in same year, even if paid subsequent to year end.

(2) All amounts are attributable to life insurance premiums paid by Radius.

Each of the named executive officers are at-will employees eligible for discretionary bonus and equity incentive awards with certain severance rights discussed further below. Dr. Lyttle, Mr. Harvey, Mr. Hattersley and Mr. O'Dea have target bonus percentages of 50%, 30%, 25% and 33% respectively. For 2010, each had the opportunity to achieve a bonus of 125% of their respective target bonus by achievement of certain corporate goals. These goals included a successful outcome from the End of Phase 2 meeting with the FDA for BA058 Injection (25% weighting), the successful completion of the Nordic arrangements to manage the BA058 Injection Phase 3 study for the Company (65% weighting),

Table of Contents

and successful completion of the Phase 1 study for BA058 Microneedle Patch (35% weighting). The Compensation Committee considered management performance against these goals and determined that bonus payments should be made at 125% of each named executive officer's target bonus percentage.

If his employment is terminated without cause or he resigns for good reason, Dr. Lyttle will receive 12 months salary in severance payments, payable in accordance with the payroll practice then in effect, and for a period of 12 months, the continued payment or subsidy of health insurance benefits to the same extent as being paid or subsidized at the time of termination. Upon a change of control, if not offered a position or terminated within 12 months following the closing, Dr. Lyttle shall be entitled to 18 months salary in severance payments and 50% of his then unvested options will become immediately vested and exercisable. Additionally, if, upon a change of control, certain milestones have not been achieved prior to such change of control and the business plan or objectives of the Company are modified by the successor company such that the expectations of achieving or satisfying such milestones is unreasonable then any unvested options and additional options that would otherwise vest upon achievement of such milestones shall vest effective as of the date the successor company changes or modifies the business plan or objective of the Company.

If his employment is terminated without cause or he resigns with good reason, Mr. Harvey will receive 6 months salary in severance payments, payable in accordance with the payroll practice then in effect, and for a period of 6 months, the continuation of health insurance at no cost to him for 6 months and all options which would have vested in the 6 months following such termination but for such termination shall become immediately exercisable. If the Company is acquired, 50% of his then unvested options will become immediately vested and exercisable.

Following termination of employment without cause, and subject to signing a general release, Mr. Hattersley and Mr. O'Dea are entitled to severance payments equal to 6 months of their then current base salary (minus required withholdings). In addition, if they elect and remain eligible for COBRA coverage during the six month period following the termination of their employment, they are entitled to be reimbursed for the portion of COBRA premium would have been paid by the Company had such person remained employed by Company during such period.

Compensation of Directors

No member of our board of directors received any compensation for services as a director of the Company during the fiscal year ended December 31, 2010. Neither we nor the Former Operating Company has had any formal policy governing the compensation of directors.

During the Former Operating Company's fiscal year ended December 31, 2010, the Former Operating Company granted to Alan Auerbach options to acquire 256,666 shares of Radius Common Stock at an exercise price of $1.35 per share. The following table summarizes all compensation earned by or paid to Mr. Auerbach in the fiscal year ended December 31, 2010. Mr. Auerbach was not a director of the Former Operating Company in 2009. Mr. Auerbach's options were assumed by us in the Merger.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)	Non-qualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)(1)
Alan H. Auerbach (Director)(2)	2010	0	0	0	$ 194,040	0	0	0	$ 194,040

(1) The value of the option award was calculated based on 256,666 options outstanding at December 31, 2010 multiplied by the fair value per share of $0.756 that was derived using the Black-Scholes-Merton option pricing model. This model used the following assumptions in valuing the options; expected dividend yield of 0, risk-free interest rate of 1.92%, expected term of 6.25 years, and volatility of 58%.

(2) At December 31, 2010 Mr. Auerbach has 256,666 options outstanding and zero stock awards outstanding.

Table of Contents

Grants of Plan-Based Awards and Equity Awards

No plan-based awards or equity awards were granted to any of our or the Former Operating Company's named executive officers or directors during the fiscal year ended December 31, 2010.

Option Exercises and Stock Vested; Outstanding Equity Awards at Fiscal Year End

No unexercised options or warrants were held by any of our named executive officers at December 31, 2010. No options to purchase our capital stock were exercised by any of our named executive officers, nor was any restricted stock held by such executive officers vested during the fiscal year ended December 31, 2010.

During the fiscal year ended December 31, 2010, no Former Operating Company options held by named executive officers, director or proposed director were exercised. At the end of such period, the following options (which will be assumed in the Merger by the Company) were held by our named executive officers, directors and proposed Company directors. We assumed all of the Former Operating Company's options in the Merger:

	Number of Unexercised Securities			
Name	**Exercisable**	**Unexercisable**	**Exercise Price**	**Expiration**
C. Richard Lyttle	101,562	6,770(1)	$ 1.50	10/28/14
	148,605	9,906(1)	$ 0.90	7/12/17
	190,005	12,667(1)	$ 1.20	5/8/18
	80,977	5,398(1)	$ 1.50	12/3/18
Nicholas Harvey	66,711	16,677(2)	$ 0.90	7/12/17
	51,459	11,875(3)	$ 1.20	5/8/18
	13,496	13,496(4)	$ 1.20	12/3/18
Louis O'Dea	13,141	9,500(5)	$ 1.50	2/15/16
	34,622	6,924(6)	$ 0.90	7/12/17
	57,634	13,300(7)	$ 1.20	5/8/18
	15,115	15,115(8)	$ 1.20	12/3/18
Gary Hattersley	10,833	0	$ 1.50	12/16/13
	5,416	0	$ 1.50	2/15/16
	20,804	2,972(9)	$ 0.90	7/12/17
	24,700	5,700(10)	$ 1.20	5/8/18
	6,478	6,478(11)	$ 1.20	12/3/18
Alan Auerbach	0	138,973(12)	$ 1.35	10/12/20
	0	117,693(13)	$ 1.35	10/12/20

(1) These stock options vest on the execution of an out-licensing partnership which the Board of Directors deemed satisfied on the signing of the Clinical Trial Services Agreement with Nordic on March 29, 2011.

(2) These stock options vest on the execution of an out-licensing partnership which the Board of Directors deemed satisfied on the signing of the Clinical Trial Services Agreement with Nordic on March 29, 2011.

(3) These stock options vest as to 3,958 shares (as rounded) on January 1, April 1, July 1 of 2011.

(4) These stock options vest as to 1,687 shares on the first day of each quarter ending October 1, 2012.

(5)

These stock options vest on the randomization of the first patient in the Phase 3 study of BA058 Injection which occurred in April 26, 2011.

Table of Contents

(6) These stock options vest as to 3,462 shares on January 1 and April 1 of 2011.

(7) These stock options vest as to 4,433 shares (as rounded) on January 1, April 1, July 1 of 2011.

(8) These stock options vest as to 1,889 shares (as rounded) on the first day of each quarter ending October 1, 2012.

(9) These stock options vest as to 1,486 shares on January 1 and April 1 of 2011.

(10) These stock options vest as to 1,900 shares on January 1, April 1, July 1 of 2011.

(11) These stock options vest as to 809 shares (as rounded) on the first day of each quarter ending October 1, 2012.

(12) These stock options vest as to 11,581 shares (as rounded) on the first day of each quarter ending October 1, 2013.

(13) These stock options vest as to 9,808 shares (as rounded) on the first day of each quarter ending October 1, 2013.

2003 Long-Term Incentive Plan

Generally, in the Merger, we assumed the Former Operating Company's 2003 Long-Term Incentive Plan (the "Incentive Plan") and all options to acquire common stock of the Former Operating Company issued thereunder. The plan is intended to assist us and our affiliates in attracting and retaining employees and consultants of outstanding ability and to promote the identification of their interests with those of our stockholders and our affiliates. Under the plan, we are authorized to issue incentive stock options, nonstatutory stock options, rights, incentive stock grants, performance stock grants and restricted stock. Only incentive stock options and non-statutory stock options have been granted under the plan. We have 1,281,966 options issued and unexercised, 1,052,545 of which are vested. The Company has the right to issue additional awards under the plan for an aggregate of 315,923 shares of Common Stock. If an option or right expires or terminates for any reason (other than termination by virtue of the exercise of a related option or related right, as the case may be) without having been fully exercised, if shares of restricted stock are forfeited, or if shares covered by an incentive share award or performance award are not issued or are forfeited, the unissued or forfeited shares that had been subject to the award become available for the grant of additional awards.

Administration. The compensation committee of the board of directors administers the incentive plan. In the event that there is no compensation committee, the board of directors administers the plan. The committee or the board may delegate authority to administer the incentive plan to any other committee. Subject to the terms of the incentive plan, the plan administrator (the board or its authorized committee) selects the recipients of awards and determine the:

number of shares of common stock covered by the awards and the dates upon which such awards become exercisable or any restrictions lapse, as applicable;

type of award and the price and method of payment for each such award;

vesting period for options and restricted stock, and any acceleration;

exercise price or purchase price of awards; and

duration of options.

Incentive Stock Options. Incentive stock options are intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code and are granted pursuant to incentive stock option agreements. The plan administrator determines the exercise price for an incentive stock option, which may not be less than 100% of the fair market value of the stock underlying the option determined on the date of grant. Notwithstanding the foregoing, incentive options granted to employees who own, or

Table of Contents

are deemed to own, more than 10% of our voting stock, must have an exercise price not less than 110% of the fair market value of the stock underlying the option determined on the date of grant.

Nonstatutory Stock Options. Nonstatutory stock options are granted pursuant to nonstatutory stock option agreements. The plan administrator determines the exercise price for a nonstatutory stock option.

Vesting. Options granted under the plan generally vest in sixteen (16) quarterly installments, each quarterly installment being equal in number of shares as possible (as determined by the Company in its reasonable discretion), with the first quarterly installment vesting one quarter after the date of the grant, and an additional quarterly installment vesting on the first day of each calendar quarter thereafter, until all of the shares subject to the option are fully vested and the option may be exercised as to 100% of the shares issuable upon exercise thereof.

Rights. Stock appreciation rights are granted pursuant to award agreements. Rights may be granted under the plan (a) in connection with, an at the same time as, the grant of an option under the plan, (b) by amendment of an outstanding option granted under the plan, or (c) independent of any option granted under the plan. A rights granted under the plan in relation to an option granted under the plan are referred to as a related right. Upon exercise, in whole or in part, the holder is entitled to receive either cash or that umber of shares, or a combination thereof, in an amount having an aggregate fair market value, as determined under the plan, as of the exercise date not to exceed the number of shares subject to the portion of the right exercised multiplied by an amount equal to the excess of (x) the fair market value of the right as of the exercise date over (b) either (i) the fair market value on the grant date if the right is not a related right or (ii) the exercise price of the related option if the right is a related right. The exercise, in whole or in part, of a related right reduces the number of shares subject to the related option and an exercise of a related options will reduce the number of shares subject to the related right.

Restricted Stock Awards. Restricted stock awards are granted pursuant to restricted stock award agreements. The purchase price for restricted stock awards are determined by the plan administrator. Restricted stock awards may be subject to a repurchase right in accordance with a vesting schedule determined by the plan administrator.

Performance Awards. Performance awards are granted pursuant award agreements that provide for the payment of cash and/or issuance of shares on terms and conditions determined by the plan administrator.

Other Equity Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock.

Changes to Capital Structure. In the event of certain types of changes in our capital structure, such as a share split, the number of shares reserved under the plan and the number of shares and exercise price or strike price, if applicable, of all outstanding awards will be appropriately adjusted.

Dividends. Any award under the plan may confer upon the recipient the right to receive dividend payments or dividend equivalent payments with respect to the shares subject to the award. Such dividend payments may be paid currently or credited to an account in favor of the recipient. Such dividends may be settled in cash or shares, as determined by the plan administrator.

Employment Agreements

Each of the named executive officers are at-will employees eligible for discretionary bonus and equity incentive awards with certain severance rights discussed further below. The Company entered into at-will employment agreements with each of the named executive officers on the date set forth next to such officer's name below. The table below also sets forth for each of the named executive

Table of Contents

officers such officer's initial salary. The initial salary of each named executive officer has been reviewed and adjusted on an annual basis in accordance with procedures established from time to time by the Company's board of directors. Each agreement, provides that such named executive officer is eligible to receive annual performance bonuses. See, "Summary Compensation Table By the Former Operating Company prior to the Merger" for the current base salary and annual performance bonus target for each named executive officer.

Name:	Agreement Date	Initial Base Salary
Richard Lyttle	July 2, 2004	$ 300,000
Nick Harvey	November, 15, 2006	$ 250,000
Louis O'Dea	January 30, 2006	$ 279,000
Gary Hattersley	November 14, 2003	$ 130,000

Mr. Harvey's agreement provides for indemnification against all liabilities, claims, damages, costs and expenses arising from his serving as an officer. The agreements provided for initial stock option grants and vesting, all of which are fully vested, paid vacation and access to our benefits programs.

If his employment is terminated without cause or he resigns for good reason, Dr. Lyttle will receive 12 months salary in severance payments, payable in accordance with the payroll practice then in effect, and for a period of 12 months, the continued payment or subsidy of health insurance benefits to the same extent as being paid or subsidized at the time of termination. Upon a change of control, if not offered a position or terminated within 12 months following the closing, Dr. Lyttle shall be entitled to 18 months salary in severance payments and 50% of his then unvested options will become immediately vested and exercisable. Additionally, if, upon a change of control, certain milestones have not been achieved prior to such change of control and the business plan or objectives of the Company are modified by the successor company such that the expectations of achieving or satisfying such milestones is unreasonable then any unvested options and additional options that would otherwise vest upon achievement of such milestones shall vest effective as of the date the successor company changes or modifies the business plan or objective of the Company.

If his employment is terminated without cause or he resigns with good reason, Mr. Harvey will receive 6 months salary in severance payments, payable in accordance with the payroll practice then in effect, and for a period of 6 months, the continuation of health insurance at no cost to him for 6 months and all options which would have vested in the 6 months following such termination but for such termination shall become immediately exercisable. If the Company is acquired, 50% of his then unvested options will become immediately vested and exercisable.

Following termination of employment without cause, and subject to signing a general release, Mr. Hattersley and Mr. O'Dea are entitled to severance payments equal to 6 months of their then current base salary. In addition, if they elect and remain eligible for COBRA coverage during the such six month period, they are entitled to be reimbursed for the portion of COBRA premium would have been paid by the Company had such person remained employed by Company during such period.

Estimated Benefits and Payments Upon Termination of Employment

The following table describes the potential payments and benefits upon termination of our named executive officers' employment before or after a change in control of our company as described above,

Table of Contents

as if each officer's employment terminated as of December 31, 2010, the last business day of the 2010 fiscal year.

Name	Benefit	Termination Other than for Cause after a Change in Control	Termination Other than for Cause not in a Change in Control
Richard Lyttle	Severance	$ 567,933	$ 378,622
	Option Acceleration	$ 3,584	$ 0
	COBRA Premiums	$ 25,691(1)	$ 17,127(1)
	Vacation Payout	$ 14,562	$ 14,562
	Total Value	$ 611,770	$ 410,311
Nick Harvey	Severance	$ 139,246	$ 139,246
	Option Acceleration	$ 5,655	$ 1,694
	COBRA Premiums	$ 12,845	$ 12,845
	Vacation Payout	$ 10,711	$ 10,711
	Total Value	$ 168,457	$ 164,496
Louis O'Dea	Severance	$ 159,682	$ 159,682
	Option Acceleration	$ 0	$ 0
	COBRA Premiums	$ 10,919	$ 10,919
	Vacation Payout	$ 12,283	$ 12,283
	Total Value	$ 182,884	$ 182,884
Gary Hattersley	Severance	$ 111,930	$ 111,930
	Option Acceleration	$ 0	$ 0
	COBRA Premiums	$ 10,919(2)	$ 10,919(2)
	Vacation Payout	$ 8,527	$ 8,527
	Total Value	$ 131,376	$ 131,376

(1) Dr. Lyttle is not currently enrolled in our medical plan. Dr. Lyttle is eligible to enroll in our medical plan and upon his enrollment would be entitled to this amount in the event of his termination without cause.

(2) Mr. Hattersley is not currently enrolled in our medical or dental plans. Mr. Hattersley is eligible to enroll in such plans and upon his enrollment would be entitled to this amount in the event of his termination without cause.

For purposes of valuing the severance and vacation payments in the table above, we used each executive officer's base salary in effect at the end of 2010 and the number of accrued but unused vacation days at the end of 2010.

The value of option acceleration shown in the table above was calculated based on the assumption that the officer's employment was terminated and the change in control (if applicable) occurred on December 31, 2010 and that the fair market value of our common stock on that date was $1.35. The value of the vesting acceleration was calculated by multiplying the number of unvested shares subject to each option by the difference between the fair market value of our common stock as of December 31, 2010 and the exercise price of the option.

Pension Benefits

No named executive officers received or held pension benefits during the fiscal year ended December 31, 2010.

Nonqualified Deferred Compensation

No nonqualified deferred compensation was offered or issued to any named executive officer during the fiscal year ended December 31, 2010.

88

Table of Contents

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth (i) each person known by the Company to be the beneficial owner calculated in accordance with Rule 13d-3(d)(1) promulgated under the Exchange Act of more than 5% of the outstanding shares of Common Stock, (ii) each director and executive officer of the Company and (iii) all officers and directors as a group. Unless otherwise stated in the table or its footnotes, the person and entities listed below have the sole voting power and investment power with respect to the shares set forth next to one's name. Unless otherwise noted, the address of each stockholder below is c/o Radius Health, Inc., 201 Broadway, 6th Floor, Cambridge, MA 02139.

Name, (Title) and Address	Shares Beneficially Owned	Title of Class	Percentage of Class(1)(a)	Percentage of Converted Common Stock(1)(b)
C. Richard Lyttle, Ph.D. (Chief Executive Officer, President and Director)	555,893(2)	Common Stock	51.39%	
		Converted Common Stock		3.35%
Nick Harvey (Chief Financial Officer, Treasurer, and Secretary)	166,968(3)	Common Stock	22.89%	
		Converted Common Stock		1.03%
Louis O'Dea	187,006(4)	Common Stock	24.92%	
		Converted Common Stock		1.15%
Gary Hattersley	80,142(5)	Common Stock	11.91%	
		Converted Common Stock		0.50%
Dr. Ansbert Gadicke (Director)	6,563,550(6)	Common Stock	91.72%	
	200,909(7)	Series A-1 Preferred Stock	48.62%	
	402, 115(8)	Series A-2 Preferred Stock	40.90%	
	53,331(9)	Series A-3 Preferred Stock	37.50%	
		Converted Common Stock		40.81%
Alan H. Auerbach (Director)	85,555(10)	Common Stock	12.62%	
		Converted Common Stock		0.53%
Jonathan Fleming (Director)	1,364,834(11)	Common Stock	70.28%	
	109,718(12)	Series A-2 Preferred Stock	11.16%	
	25,233(13)	Series A-3 Preferred Stock	17.74%	
		Converted Common Stock		8.39%
Kurt Graves (Director)	0		0%	0%
Dr. Martin Muenchbach (Director)	1,487,580(14)	Common Stock	71.51%	
	43,596(15)	Series A-1 Preferred Stock	10.55%	

	105,162(16)	Series A-2 Preferred Stock	10.70%	
		Converted Common Stock		9.25%
Elizabeth Stoner (Director)	0		0	0%
Entities Affiliated with: MPM Bioventures III, L.P.	6,563,550(17)	Common Stock	91.72%	
c/o MPM Capital	200,909(18)	Series A-1 Preferred Stock	48.62%	
200 Carendon St	402,115(19)	Series A-2 Preferred Stock	40.90%	
54th Fl.	53,331(20)	Series A-3 Preferred Stock	37.50%	
Boston, MA 02116		Converted Common Stock		40.81%

Table of Contents

Name, (Title) and Address	Shares Beneficially Owned	Title of Class	Percentage of Class(1)(a)	Percentage of Converted Common Stock(1)(b)
The Wellcome Trust Limited as trustee of The Wellcome Trust	2,358,470(21)	Common Stock	79.92%	
215 Euston Road	25,522(22)	Series A-1 Preferred Stock	6.18%	
London NW1 2BE England	210,325	Series A-2 Preferred Stock	21.39%	
		Converted Common Stock		14.66%
HealthCare Ventures VII, L.P.	1,899,033(23)	Common Stock	78.85%	
55 Cambridge Parkway,	19,651(24)	Series A-1 Preferred Stock	4.76%	
Suite 102	98,278	Series A-2 Preferred Stock	10.00%	
Cambridge,	63,663	Series A-3 Preferred Stock	44.76%	
Massachusetts 02142-1234		Converted Common Stock		11.81%
Entities Affiliated with: Saints Captial VI, L.P.	1,528,584(25)	Common Stock	72.59%	
475 Sansome Street	16,375(26)	Series A-1 Preferred Stock	3.96%	
Suite 1850	109,718(27)	Series A-2 Preferred Stock	11.16%	
San Francisco, CA 94111	25,233(28)	Series A-3 Preferred Stock	17.74%	
		Converted Common Stock		9.50%
BB Biotech Ventures II, L.P.(29)	1,487,580(29)	Common Stock	71.51%	
Traflagar Court	43,596(30)	Series A-1 Preferred Stock	10.55%	
Les Banques	105162	Series A-2 Preferred Stock	10.70%	
St. Peter Port		Converted Common Stock		9.25%
Guernsey Channel Islands GY1 3QL				
Entities Affiliated with: Oxford Bioscience Partners	1,364,834(31)	Common Stock	70.28%	
222 Berkley Street	109,718(32)	Series A-2 Preferred Stock	11.16%	
Suite 1650	25,233(33)	Series A-3 Preferred Stock	17.74%	
Boston, MA 02116		Converted Common Stock		8.49%
Healthcare Private Equity Limited Partnership	628,910(34)	Common Stock	51.49%	
Edinburgh One	6,805	Series A-1 Preferred Stock	1.65%	
Morrison Street	56,086	Series A-2 Preferred Stock	5.70%	
Edinburgh EH3 8BE		Converted Common Stock		3.91%

U.K				
Brookside Capital Partners Fund, L.P. Bain Capital, LLC 111 Huntington Avenue Boston, MA 02199	409,400(35)	Common Stock	40.86%	
	40,940	Series A-1 Preferred Stock	9.91%	
		Converted Common Stock		2.55%
BB Biotech Growth N.V. Asset Management BAB N.V. Ara Hill Top Building, Unit A-5 Pletterijweg Oost 1 Curaçao, Dutch Caribbean	409,400(36)	Common Stock	40.86%	
	40,940	Series A-1 Preferred Stock	9.91%	
		Converted Common Stock		2.55%
Ipsen Pharma SAS 65, quai Georges Gorse 92100 Boulogne Billancourt France	173,260(37)	Common Stock	22.62%	
	17,326	Series A-1 Preferred Stock	4.19%	
		Converted Common Stock		1.08%

Table of Contents

Name, (Title) and Address	Shares Beneficially Owned	Title of Class	Percentage of Class(1)(a)	Percentage of Converted Common Stock(1)(b)
Stavros C. Manolagas 35 River Ridge Circle Little Rock, AR 72227	91,040	Common Stock Converted Common Stock	15.36%	0.57%
Nordic Bioscience Herlev Hovedgade 207 2730 Herlev Denmark	64,430(38) 6,443	Common Stock Series A-5 Preferred Stock Converted Common Stock	9.81% 100%	0.40%
Michael Rosenblatt 130 Lake Ave Newton, MA 02459	82,714	Common Stock Converted Common Stock	13.96%	0.51%
John Katzenellenbogen Trust 704 West Pennsylvania Avenue Urbana, Illinois 61801	49,399(39)	Common Stock Converted Common Stock	8.34%	0.31%
Chris Miller 11Edgar Walker Court Hingham, MA 02043	33,355	Common Stock Converted Common Stock	5.63%	0.21%
Bart Henderson 48 Prentiss Lane Belmont, MA 02478	30,468	Common Stock Converted Common Stock	5.14%	0.19%
All Officers and Directors as a group (10 individuals)	10,491,518	Common Stock Converted Common Stock	95.74%	61.59%

(1)

(a) Because shares of Preferred Stock vote together with Common Stock on an as-converted basis the percentages of beneficial ownership calculated in accordance with Rule 13d-3(d)(1) promulgated under the Exchange Act and reported in this column do not reflect the beneficial owner's voting percentage of our outstanding capital stock. See Note (1)(b).

(1)

(b) A more accurate reflection of each beneficial owner's voting percentage is their percentage of the Preferred Stock and the Common Stock voting together as a single class (the "Converted Common Stock"), assuming the conversion of all issued and outstanding shares of Preferred Stock. In order to provide accurate disclosure of the relevant beneficial ownership percentage of each beneficial owner included in this table we have set forth each such beneficial owner's ownership percentage (calculated in accordance with Rule 13d-3 of the Exchange Act) of the Converted Common Stock in this column. See Note (1)(a).

(2)

Includes 489,227 options to purchase our Common Stock anticipated to be exercisable within 60 days after October 6, 2011.

(3)

Includes 136,968 options to purchase our Common Stock anticipated to be exercisable within 60 days after October 6, 2011.

(4) Includes 157,799 options to purchase our Common Stock anticipated to be exercisable within 60 days after October 6, 2011.

(5) Includes 80,142 options to purchase our Common Stock anticipated to be exercisable within 60 days after October 6, 2011.

(6) Includes 82,220 shares of Common Stock issuable upon conversion of 8,222 shares of Company Series A-1 Preferred Stock, 121,940 shares of Common Stock issuable upon conversion of 12,194 shares of Company Series A-2 Preferred Stock, 29,850 shares of Common Stock issuable upon conversion of 2,985 shares of Company Series A-3 Preferred Stock issued to MPM BioVentures III, L.P. ("BV III"), in the Merger; 1,222,900 shares of Common Stock issuable upon conversion of 122,290 shares of Company Series A-1 Preferred Stock, 1,813,640 shares of Common Stock issuable upon conversion of 181,364 shares of Company Series A-2 Preferred Stock, and 443,950 shares of Common Stock issuable upon conversion of 44,395 shares of Company Series A-3 Preferred Stock issued to MPM BioVentures III-QP, L.P. ("BV III QP"), in the Merger; 103,350 shares of Common Stock issuable upon conversion of 10,335 shares of Company Series A-1 Preferred Stock, 153,270 shares of Common Stock issuable upon conversion of 15,327 shares of Company

Table of Contents

Series A-2 Preferred Stock, and 37,520 shares of Common Stock issuable upon conversion of 3,752 shares of Company Series A-3 Preferred Stock issued to MPM BioVentures III GmbH & Co. Beteiligungs K.G. ("BV III KG"), in the Merger; 36,930 shares of Common Stock issuable upon conversion of 3,693 shares of Company Series A-1 Preferred Stock, 54,770 shares of Common Stock issuable upon conversion of 5,477 shares of Company Series A-2 Preferred Stock, and 13,400 shares of Common Stock issuable upon conversion of 1,340 shares of Company Series A-3 Preferred Stock issued to MPM BiVentures III Parallel Fund, L.P. ("BV III PF"), in the Merger; 23,680 shares of Common Stock issuable upon conversion of 2,368 shares of Company Series A-1 Preferred Stock, 35,110 shares of Common Stock issuable upon conversion of 3,511 shares of Company Series A-2 Preferred Stock, and 8,590 shares of Common Stock issuable upon conversion of 859 shares of Company Series A-3 Preferred Stock issued to MPM Asset Management Investors 2003 BVIII LLC ("AM LLC") in the Merger; 540,010 shares of Common Stock issuable upon conversion of 54,001 shares of Company Series A-1 Preferred Stock, and 1,842,420 shares of Common Stock issuable upon conversion of 184,242 shares of Company Series A-2 Preferred Stock issued to MPM Bio IV NVS Strategic Fund, L.P. ("MPM NVS") in the Merger. Additionally, BV III has committed to purchase an aggregate of 6,874 shares of Company Series A-1 Preferred Stock at two subsequent closings, BV III QP has committed to purchase an aggregate of 102,238 shares of Company Series A-1 Preferred Stock at two subsequent closings, BV III KG has committed to purchase an aggregate of 8,640 shares of Company Series A-1 Preferred Stock at two subsequent closings, BV III PF has committed to purchase an aggregate of 3,087 shares of Company Series A-1 Preferred Stock at two subsequent closings, AM LLC has committed to purchase an aggregate of 1,979 shares of Company Series A-1 Preferred Stock at two subsequent closings, and MPM NVS has committed to purchase an aggregate of 60,536 shares of Company Series A-1 Preferred Stock at two subsequent closings. MPM BioVentures III GP, L.P. and MPM BioVentures III LLC ("BV3LLC"), are the direct and indirect general partners of BV III, BV III QP, BV III KG, and BV III PF. MPM BioVentures IV GP LLC and MPM BioVentures IV LLC ("BV4LLC") are the direct and indirect general partners of MPM NVS. Dr. Gadicke is a Series A Member of BV3LLC, Member of BV4LLC and Manager of AM LLC and shares voting and investment power with respect to these shares. Each entity mentioned above and Dr. Gadicke disclaim beneficial ownership of all shares not held by it or him of record. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BV III, BV III QP, BV III KG, BV III PF, AM LLC, MPM NVS, Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III, Dennis Henner, Ashley L. Dombkowski, William Greene, Vaughn Kailian, James Paul Scopa, Steven St. Peter, and John Vander Vort.

(7)

Includes of 8,222 shares of Company Series A-1 Preferred Stock issued to BV III in the Merger; 122,290 shares of Company Series A-1 Preferred Stock issued to BV III QP in the Merger; 10,335 shares of Company Series A-1 Preferred Stock issued to BV III KG in the Merger; 3,693 shares of Company Series A-1 Preferred Stock issued to BV III PF in the Merger; 2,368 shares of Company Series A-1 Preferred Stock, issued to AM LLC in the Merger; and 54,001 shares of Company Series A-1 Preferred Stock issued to MPM NVS in the Merger. Dr. Gadicke is a Series A Member of BV3LLC, Member of BV4LLC and Manager of AM LLC and shares voting and investment power with respect to these shares. Each entity mentioned above and Dr. Gadicke disclaim beneficial ownership of all shares not held by it or him of record. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BV III, BV III QP, BV III KG, BV III PF, AM LLC, MPM NVS, Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III, Dennis Henner, Ashley L. Dombkowski, William Greene, Vaughn Kailian, James Paul Scopa, Steven St. Peter, and John Vander Vort.

(8)

Includes 12,194 shares of Company Series A-2 Preferred Stock issued BV III in the Merger; 181,364 shares of Company Series A-2 Preferred Stock issued to BV III QP in the Merger, 15,327 shares of Company Series A-2 Preferred Stock issued BV III KG in the Merger; 5,477 shares of Company Series A-2 Preferred Stock issued to BV III PF in the Merger; 3,511 shares of Company Series A-2 Preferred Stock issued to AM LLC in the Merger; and 184,242 shares of Company Series A-2 Preferred Stock issued to MPM NVS in the Merger. Dr. Gadicke is a Series A Member of BV3LLC, Member of BV4LLC and Manager of AM LLC and shares voting and investment power with respect to these shares. Each entity mentioned above and Dr. Gadicke disclaim beneficial ownership of all shares not held by it or him of record. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BV III, BV III QP, BV III KG, BV III PF, AM LLC, MPM NVS, Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III, Dennis Henner, Ashley L. Dombkowski, William Greene, Vaughn Kailian, James Paul Scopa, Steven St. Peter, and John Vander Vort.

(9)

Includes 2,985 shares of Company Series A-3 Preferred Stock issued to BV III in the Merger; 44,395 shares of Company Series A-3 Preferred Stock issued BV III QP, in the Merger; 3,752 shares of Company

Table of Contents

Series A-3 Preferred Stock issued to BV III KG, in the Merger; 1,340 shares of Company Series A-3 Preferred Stock issued to BV III PF, in the Merger; and 859 shares of Company Series A-3 Preferred Stock issued to AM LLC in the Merger. Dr. Gadicke is a Series A Member of BV3LLC, Member of BV4LLC and Manager of AM LLC and shares voting and investment power with respect to these shares. Each entity mentioned above and Dr. Gadicke disclaim beneficial ownership of all shares not held by it or him of record. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BV III, BV III QP, BV III KG, BV III PF, AM LLC, MPM NVS, Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III, Dennis Henner, Ashley L. Dombkowski, William Greene, Vaughn Kailian, James Paul Scopa, Steven St. Peter, and John Vander Vort.

(10)

Includes 85,555 options to purchase our Common Stock anticipated to be exercisable within 60 days after October 6, 2011.

(11)

Includes 15,173 shares of Common Stock and 1,086,280 shares of Common Stock issuable upon conversion of 108,628 shares of Company Series A-2 Preferred Stock, 249,830 shares of Common Stock issuable upon conversion of 24,983 shares of Company Series A-3 Preferred Stock (the "OBP IV Shares") held directly by Oxford Bioscience Partners IV L.P. ("OBP IV"); and 151 shares of Common Stock and 10,900 shares of Common Stock issuable upon conversion of 1,090 shares of Company Series A-2 Preferred Stock, 2,500 shares of Common Stock issuable upon conversion of 250 shares of Company Series A-3 Preferred Stock (the "mRNA Fund II Shares") held directly by mRNA Fund II L.P. ("mRNA Fund II"). The Oxford Shares are indirectly held by OBP Management IV L.P. ("OBP Management IV"), the sole general partner of each of OBP IV and mRNA Fund II, and the individual general partners of OBP Management IV. The individual general partners of OBP Management IV are Jonathan Fleming and Alan Walton. Each entity mentioned above and Messrs. Fleming and Walton disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the Oxford Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

(12)

Includes 108,628 shares of Company Series A-2 Preferred Stock held directly by OBP IV (the "OBP IV A-2 Shares") and 1,090 shares of Company Series A-2 Preferred Stock held directly by mRNA Fund II (the "mRNA Fund II A-2 Shares"). The OBP IV A-2 Shares and the mRNA Fund II A-2 Shares are indirectly held by Oxford Bioscience Partners IV L.P. ("OBP L.P."), a member of OBP IV, and OBP Management IV, the sole general partner of OBP LP and mRNA II, and the individual managers of OBP Management IV. The individual managers of OBP Management IV are Jonathan Fleming and Alan Walton. Each entity mentioned above and Messrs. Fleming and Walton disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the Saints A-2 Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

(13)

Includes 24,983 shares of Company Series A-3 Preferred Stock held directly by OBP IV (the "OBP IV A-3 Shares") and 250 shares of Company Series A-3 Preferred Stock held directly by mRNA Fund II (the mRNA Fund II A-3 Shares"). The OBP IV A-3 Shares and the mRNA Fund II A-3 Shares are indirectly held by OBP LP, a member of OBP IV, and OBP Management IV, the sole general partner of OBP LP and mRNA II, and the individual managers of OBP Management IV. The individual managers of OBP Management IV are Jonathan Fleming and Alan Walton. Each entity mentioned above and Messrs. Fleming and Walton disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the Saints A-3 Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

(14)

Includes 435,960 shares of Common Stock issuable upon conversion of 43,596 shares of Company Series A-1 Preferred Stock (the "BBBV LP A-1 Preferred Stock"), and 1,051,620 shares of Common Stock issuable upon conversion of 105,162 shares of Company Series A-2 Preferred Stock (together with the BBBV LP A-1 Preferred Stock the "BBBV LP Shares") issued to BB Biotech Ventures II L.P. ("BBBV LP") in the Merger. Additionally, BBBV LP has committed to purchase an aggregate of 40,940 shares of Company Series A-1 Preferred Stock at two subsequent closings. BB Biotech Ventures GP (Guernsey) Limited ("BBBV Limited") is the General Partner of BBBV LP. The directors of BBBV Limited are Jan Bootsma;

93

Table of Contents

Pascal Mahieux, and Ben Morgan. Dr. Muenchbach, the Senior Investment Advisor Private Equity at Bellevue Asset Management AG, advises Asset Management BAB N.V. ("AMB NV") who, pursuant to a services agreement with BAM AG, advises the directors of BBBV Limited. Each of the foregoing, except BBBV LP in the case of the BBBV LP Shares, disclaims beneficial ownership of the BBBV LP Shares except to the extent of their pecuniary interest therein, if any. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BBBV LP, BBBV Limited, Jan Bootsma, Pascal Mahieux, Ben Morgan, and Martin Muenchbach.

(15)

Includes 43,596 shares of Company Series A-1 Preferred Stock issued to BB Biotech Ventures II L.P. in the Merger. BB Biotech Ventures II L.P. has committed to purchase an aggregate of 40,940 shares of Company Series A-1 Preferred Stock at two subsequent closings. Voting and investment power with respect to these shares is shared by the general partners of this fund.

(16)

Includes 105,162 shares of Company Series A-2 Preferred Stock issued to BB Biotech Ventures II L.P. in the Merger. Voting and investment power with respect to these shares is shared by the general partners of this fund.

(17)

Includes 82,220 shares of Common Stock issuable upon conversion of 8,222 shares of Company Series A-1 Preferred Stock, 121,940 shares of Common Stock issuable upon conversion of 12,194 shares of Company Series A-2 Preferred Stock, 29,850 shares of Common Stock issuable upon conversion of 2,985 shares of Company Series A-3 Preferred Stock issued to BV III, in the Merger; 1,222,900 shares of Common Stock issuable upon conversion of 122,290 shares of Company Series A-1 Preferred Stock, 1,813,640 shares of Common Stock issuable upon conversion of 181,364 shares of Company Series A-2 Preferred Stock, and 443,950 shares of Common Stock issuable upon conversion of 44,395 shares of Company Series A-3 Preferred Stock issued to BV III QP, in the Merger; 103,350 shares of Common Stock issuable upon conversion of 10,335 shares of Company Series A-1 Preferred Stock, 153,270 shares of Common Stock issuable upon conversion of 15,327 shares of Company Series A-2 Preferred Stock, and 37,520 shares of Common Stock issuable upon conversion of 3,752 shares of Company Series A-3 Preferred Stock issued to BV III KG, in the Merger; 36,930 shares of Common Stock issuable upon conversion of 3,693 shares of Company Series A-1 Preferred Stock, 54,770 shares of Common Stock issuable upon conversion of 5,477 shares of Company Series A-2 Preferred Stock, and 13,400 shares of Common Stock issuable upon conversion of 1,340 shares of Company Series A-3 Preferred Stock issued BV III PF, in the Merger; 23,680 shares of Common Stock issuable upon conversion of 2,368 shares of Company Series A-1 Preferred Stock, 35,110 shares of Common Stock issuable upon conversion of 3,511 shares of Company Series A-2 Preferred Stock, and 8,590 shares of Common Stock issuable upon conversion of 859 shares of Company Series A-3 Preferred Stock issued to MPM Asset Management Investors AM LLC in the Merger; 540,010 shares of Common Stock issuable upon conversion of 54,001 shares of Company Series A-1 Preferred Stock, and 1,842,420 shares of Common Stock issuable upon conversion of 184,242 shares of Company Series A-2 Preferred Stock issued to MPM NVS in the Merger. Additionally BV III has committed to purchase an aggregate of 6,874 shares of Company Series A-1 Preferred Stock at two subsequent closings, BV III QP has committed to purchase an aggregate of 102,238 shares of Company Series A-1 Preferred Stock at two subsequent closings, BV III KG has committed to purchase an aggregate of 8,640 shares of Company Series A-1 Preferred Stock at two subsequent closings, BV III PF has committed to purchase an aggregate of 3,087 shares of Company Series A-1 Preferred Stock at two subsequent closings, AM LLC has committed to purchase an aggregate of 1,979 shares of Company Series A-1 Preferred Stock at two subsequent closings, and MPM NVS has committed to purchase an aggregate of 60,536 shares of Company Series A-1 Preferred Stock at two subsequent closings. Voting and investment power is shared with Dr. Gadicke and the other general partners of these funds. MPM BioVentures III GP, L.P. and MPM BioVentures III LLC ("BV3LLC"), are the direct and indirect general partners of BV III, BV III QP, BV III KG, and BV III PF. Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III and Dennis Henner are Series A members of BV III LLC and managers of AM LLC. MPM BioVentures III Parallel Fund, L.P. MPM BioVentures IV GP LLC and MPM BioVentures IV LLC are the direct and indirect general partners of MPM. Luke Evnin, Ansbert Gadicke, Ashley L. Dombkowski, William Greene, Vaughn M. Kailian, James Paul Scopa, Steven St. Peter and John Vander Vort are members of BV IV LLC. Each fund mentioned above disclaims beneficial ownership of all shares not held by it of record. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BV III, BV III QP, BV III KG, BV III PF, AM LLC, MPM NVS, Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III, Dennis Henner, Ashley L. Dombkowski, William Greene, Vaughn Kailian, James Paul Scopa, Steven St. Peter, and John Vander Vort.

(18)

Includes of 8,222 shares of Company Series A-1 Preferred Stock issued to BV III in the Merger; 122,290 shares of Company Series A-1 Preferred Stock issued to BV III QP, in the Merger; 10,335 shares of Company Series A-1 Preferred Stock, issued to BV III KG, in the Merger; 3,693 shares of Company

Table of Contents

Series A-1 Preferred Stock issued to BV III PF in the Merger; 2,368 shares of Company Series A-1 Preferred Stock, issued to AM LLC in the Merger; and 54,001 shares of Company Series A-1 Preferred Stock issued to MPM NVS in the Merger. BV III has committed to purchase an aggregate of 6,874 shares of Company Series A-1 Preferred Stock at two subsequent closings, BV III QP has committed to purchase an aggregate of 102,238 shares of Company Series A-1 Preferred Stock at two subsequent closings, BV III KG has committed to purchase an aggregate of 8,640 shares of Company Series A-1 Preferred Stock at two subsequent closings, BV III PF has committed to purchase an aggregate of 3,087 shares of Company Series A-1 Preferred Stock at two subsequent closings, AM LLC has committed to purchase an aggregate of 1,979 shares of Company Series A-1 Preferred Stock at two subsequent closings, and MPM NVS has committed to purchase an aggregate of 60,536 shares of Company Series A-1 Preferred Stock at two subsequent closings. Voting and investment power is shared with Dr. Gadicke and the other general partners of these funds. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BV III, BV III QP, BV III KG, BV III PF, AM LLC, MPM NVS, Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III, Dennis Henner, Ashley L. Dombkowski, William Greene, Vaughn Kailian, James Paul Scopa, Steven St. Peter, and John Vander Vort.

(19)

Includes 12,194 shares of Company Series A-2 Preferred Stock issued to BV III in the Merger; 181,364 shares of Company Series A-2 Preferred Stock issued to BV III QP, in the Merger 15,327 shares of Company Series A-2 Preferred Stock issued to BV III KG in the Merger; 5,477 shares of Company Series A-2 Preferred Stock issued to BV III PF, in the Merger; 3,511 shares of Company Series A-2 Preferred Stock issued to AM LLC in the Merger; and 184,242 shares of Company Series A-2 Preferred Stock issued to MPM NVS in the Merger. Voting and investment power is shared with Dr. Gadicke and the other general partners of these funds. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BV III, BV III QP, BV III KG, BV III PF, AM LLC, MPM NVS, Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III, Dennis Henner, Ashley L. Dombkowski, William Greene, Vaughn Kailian, James Paul Scopa, Steven St. Peter, and John Vander Vort.

(20)

Includes 2,985 shares of Company Series A-3 Preferred Stock issued to BV III in the Merger; 44,395 shares of Company Series A-3 Preferred Stock issued to BV III QP in the Merger; 3,752 shares of Company Series A-3 Preferred Stock issued to BV III KG, in the Merger; 1,340 shares of Company Series A-3 Preferred Stock issued BV III PF, in the Merger; and 859 shares of Company Series A-3 Preferred Stock issued to AM LLC in the Merger. Voting and investment power is shared with Dr. Gadicke and the other general partners of these funds. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BV III, BV III QP, BV III KG, BV III PF, AM LLC, MPM NVS, Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III, Dennis Henner, Ashley L. Dombkowski, William Greene, Vaughn Kailian, James Paul Scopa, Steven St. Peter, and John Vander Vort.

(21)

Includes 255,220 shares of Common Stock issuable upon conversion of 25,522 shares of Company Series A-1 Preferred Stock, and 2,103,250 shares of Common Stock issuable upon conversion of 210,325 shares of Company Series A-2 Preferred Stock issued to The Wellcome Trust Limited as trustee of The Wellcome Trust in the Merger. Additionally, The Wellcome Trust Limited as trustee of The Wellcome Trust has committed to purchase an aggregate of 51,044 shares of Company Series A-1 Preferred Stock at two subsequent closings. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 25, 2011 by The Wellcome Trust Limited as trustee of The Wellcome Trust.

(22)

The Wellcome Trust Limited as trustee of The Wellcome Trust has committed to purchase an aggregate of 51,044 shares of Company Series A-1 Preferred Stock at two subsequent closings.

(23)

Includes 83,113 shares of Common Stock and 196,510 shares of Common Stock issuable upon conversion of 19,651 shares of Company Series A-1 Preferred Stock, 982,780 shares of Common Stock issuable upon conversion of 98,278 shares of Company Series A-2 Preferred Stock, 636,630 shares of Common Stock issuable upon conversion of 63,663 shares of Company Series A-3 Preferred Stock issued to HealthCare Ventures VII, L.P. ("HCVVII") in the Merger. Additionally, HCVVII has committed to purchase an aggregate of 39,302 shares of Company Series A-1 Preferred Stock at two subsequent closings. HealthCare Partners VII, L.P. ("HCPVII") is the General Partner of HCVVII. The General Partners of HCPVII are James H. Cavanaugh, Ph.D., Harold R. Werner, John W. Littlechild, Christopher Mirabelli, Ph.D., and Augustine Lawlor. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by HCVVII, HCPVII, James H. Cavanaugh, Ph.D., Harold R. Werner, John W. Littlechild, Christopher Mirabelli, Ph.D., and Augustine Lawlor.

Table of Contents

(24)

HCVVII has committed to purchase an aggregate of 39,302 shares of Company Series A-1 Preferred Stock at two subsequent closings.

(25)

Includes: (i) 15,173 shares of Common Stock (the "OBP IV Common Shares") held directly by OBP IV Holdings LLC ("OBP IV"); (ii) 1,498,240 shares of Common Stock (the "OBP IV Conversion Shares" and, together with the OBP IV Common Shares, the "OBP IV Saints Shares") issuable to OBP IV upon the conversion of 16,213 shares of Company Series A-1 Preferred Stock held directly by OBP IV, 108,628 shares of Company Series A-2 Preferred Stock held directly by OBP IV and 24,983 shares of Company Series A-3 Preferred Stock held directly by OBP IV; (iii) 151 shares of Common Stock (the "mRNA II Common Shares") held directly by mRNA II Holdings LLC ("mRNA Saints II"); (iv) 15,020 shares of Common Stock (the "mRNA II Conversion Shares" and, together with the mRNA II Common Shares, the "mRNA II Shares") issuable to mRNA II upon the conversion of 162 shares of Company Series A-1 Preferred Stock held directly by mRNA II, 1,090 shares of Company Series A-2 Preferred Stock held directly by mRNA II and 250 shares of Company Series A-3 Preferred Stock held directly by mRNA II. The OBP IV Saints Shares and the mRNA Saints II Shares are referred to herein as the "Saints Shares." The Saints Shares are indirectly held by Saints Capital Granite, L.P. ("Saints LP"), a member of OBP IV and mRNA II, Saints Capital Granite, LLC ("Saints LLC"), the sole general partner of Saints LP, and the individual managers of Saints LLC. The individual managers of Saints LLC are Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer. Each entity mentioned above and Messrs. Halsted, Quinlivan and Sawyer disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the Saints Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

(26)

Includes: 16,213 shares of Company Series A-1 Preferred Stock held directly by OBP IV, and 162 shares of Company Series A-1 Preferred Stock held directly by mRNA II. The Saints A-1 Shares are indirectly held by Saints LP, a member of OBP IV and mRNA II, Saints LLC, the sole general partner of Saints LP, and the individual managers of Saints LLC. The individual managers of Saints LLC are Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer . Each entity mentioned above and Messrs. Halsted, Quinlivan and Sawyer disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the Saints A-1 Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

(27)

Includes: 108,628 shares of Company Series A-2 Preferred Stock held directly by OBP IV (the "OBP IV A-2 Shares") and 1,090 shares of Company Series A-2 Preferred Stock held directly by mRNA II. (together with the OBP IV A-2 Shares, the "Saints A-2 Shares"). The Saints A-2 Shares are indirectly held by Saints LP, a member of OBP IV and mRNA II, Saints LLC, the sole general partner of Saints LP, and the individual managers of Saints LLC. The individual managers of Saints LLC are Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer . Each entity mentioned above and Messrs. Halsted, Quinlivan and Sawyer disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the Saints A-2 Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

(28)

Includes: 24,983 shares of Company Series A-3 Preferred Stock held directly by OBP IV (the "OBP IV A-3 Shares"); and 250 shares of Company Series A-3 Preferred Stock held directly by mRNA II. (together with the OBP IV A-3 Shares, the "Saints A-3 Shares"). The Saints A-3 Shares are indirectly held by Saints LP, a member of OBP IV and mRNA II, Saints LLC, the sole general partner of Saints LP, and the individual managers of Saints LLC. The individual managers of Saints LLC are Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer . Each entity mentioned above and Messrs. Halsted, Quinlivan and Sawyer disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the Saints A-3 Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

Table of Contents

(29)

Includes 435,960 shares of Common Stock issuable upon conversion of 43,596 shares of Company Series A-1 Preferred Stock (the "BBBV LP A-1 Preferred Stock"), and 1,051,620 shares of Common Stock issuable upon conversion of 105,162 shares of Company Series A-2 Preferred Stock (together with the BBBV LP A-1 Preferred Stock the "BBBV LP Shares") issued to BB Biotech Ventures II L.P. ("BBBV LP") in the Merger. Additionally, BBBV LP has committed to purchase an aggregate of 40,940 shares of Company Series A-1 Preferred Stock at two subsequent closings. BB Biotech Ventures GP (Guernsey) Limited ("BBBV Limited") is the General Partner of BBBV LP. The directors of BBBV Limited are Jan Bootsma; Pascal Mahieux, and Ben Morgan. Additionally, Martin Muenchbach, the Senior Investment Advisor Private Equity at Bellevue Asset Management AG, advises Asset Management BAB N.V. ("AMB NV") who, pursuant to a services agreement with BAM AG, advises the directors of BBBV Limited. Each of the foregoing, except BBBV LP in the case of the BBBV LP Shares, disclaims beneficial ownership of the BBBV LP Shares except to the extent of their pecuniary interest therein, if any. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by BBBV LP, BBBV Limited, Jan Bootsma, Pascal Mahieux, Ben Morgan, and Martin Muenchbach.

(30)

BBBV LP has committed to purchase an aggregate of 40,940 shares of Company Series A-1 Preferred Stock at two subsequent closings.

(31)

Includes the OBP IV Shares and the mRNA Fund II Shares. The OBP IV Shares are indirectly held by Oxford Bioscience Partners IV L.P. ("OBP LP"), a member of OBP IV. The mRNA II Shares are indirectly held by mRNA Fund II L.P. ("mRNA LP"), a member of mRNA II. The Oxford Shares are indirectly held by OBP Management IV, the sole general partner of each of OBP LP and mRNA LP, and the individual general partners of OBP Management IV. The individual general partners of OBP Management IV are Jonathan Fleming and Alan Walton. Each of the entities and individuals mentioned above disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the OBP IV Shares and mRNA Fund II Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

(32)

Includes: 108,628 shares of Company Series A-2 Preferred Stock held directly by OBP IV and 1,090 shares of Company Series A-2 Preferred Stock held directly by mRNA II. The Saints A-2 Shares are indirectly held by OBP LP, a member of OBP IV, and OBP Management IV, the sole general partner of OBP LP and mRNA II, and the individual managers of OBP Management IV. The individual managers of OBP Management IV are Jonathan Fleming and Alan Walton. Each entity mentioned above and Messrs. Fleming and Walton disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the Saints A-2 Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

(33)

Includes: 24,983 shares of Company Series A-3 Preferred Stock held directly by OBP IV; and 250 shares of Company Series A-3 Preferred Stock held directly by mRNA II. The Saints A-3 Shares are indirectly held by OBP LP, a member of OBP IV, and OBP Management IV, the sole general partner of OBP LP and mRNA II, and the individual managers of OBP Management IV. The individual managers of OBP Management IV are Jonathan Fleming and Alan Walton. Each entity mentioned above and Messrs. Fleming and Walton disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the Saints A-2 Shares in which such entity or individual has no actual pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on May 27, 2011 by OBP IV, mRNA II, mRNA Fund II, OBP Management IV, Saints LP, Saints LLC, Jonathan Fleming, Alan Walton, Scott Halsted, David P. Quinlivan, and Kenneth B. Sawyer.

(34)

Includes 68,050 shares of Common Stock issuable upon conversion of 6,805 shares of Company Series A-1 Preferred Stock, and 560,860 shares of Common Stock issuable upon conversion of 56,086 shares of Company Series A-2 Preferred Stock. Healthcare Private Equity Limited Partnership ("HPELP") is a limited partnership which has one general partner, Waverley Healthcare Private Equity Limited ("Waverley GP") and one limited partner, Scottish Widows plc. As general partner, Waverley GP has authority under the HPELP limited partnership agreement ("LPA") to conduct and manage the business of HPELP. The directors of Waverley GP are Andrew November and Archie Struthers. The controlling shareholder of Waverley GP is SWIP Group Limited. The ultimate controlling entity of SWIP Group

97

Table of Contents

Limited is Lloyds Banking Group plc, a public listed company with many shareholders. The board of directors of Lloyds Banking Group plc consists of nine non-executive directors (Sir Winifried Bischoff, Lord Leitch, Anita Frew, Glen Moreno, David Roberts, T Timothy Ryan Jnr, Martin Scicluna and Anthony Watson) and three executive directors (Antonito Horta-Osorio, G Truett Tate and Tim Tookey). The Chairman (Sir Winifried Bischoff) is responsible for leadership of the board. The Group Chief executive (Antonio Horto-Osorio) is responsible for the day to day management of the business of Lloyds Banking Group plc, in accordance with the strategy and long term objectives approved by the board. Beneficial ownership information is based on information known to the Company.

(35)

Includes 409,400 shares of Common Stock issuable upon conversion of 40,940 shares of Company Series A-1 Preferred Stock. Brookside Capital Investors, L.P. ("Brookside Investors") is the sole general partner of Brookside Capital Partners Fund, L.P. ("Partners Fund"). Brookside Capital Management, LLC is the sole general partner of Brookside Investors. The control persons of Brookside Capital Management are Executive Committee members: Dewey J. Awad, Domenic J. Ferrante, Matthew V. McPherron, William E. Pappendick IV, John M. Toussaint. Beneficial ownership information is based on information known to the Company.

(36)

Includes 409,400 shares of Common Stock issuable upon conversion of 40,940 shares of Company Series A-1 Preferred Stock. BB Biotech Growth N.V. ("BB Growth") is a wholly-owned subsidiary of BB Biotech AG ("BB Biotech"). The directors and executive officers of BB Biotech are Dr. Thomas D. Szucs, Chairman and Director; Dr. Clive Meanwell, Vice Chairman and Director; and Dr. Erich Hunziker, Director. The directors and executive officers of BB Growth are Dr. Thomas D. Szucs, Statutory Director; Deanna Chemaly, Statutory Director; and Hugo Jan van Neutegem, Statutory Director. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on June 3, 2011 by BB Biotech and BB Growth.

(37)

Includes 173,260 shares of Common Stock issuable upon conversion of 17,326 shares of Company Series A-1 Preferred Stock. Ipsen Pharma SAS ("Ipsen Pharma") is a société par actions simplifiée organized under the laws of France and is a wholly-owned subsidiary of Ipsen S.A. ("Ipsen"), a société anonyme organized under the laws of France. Ipsen's majority shareholder is Mayroy, a société anonyme organized under the laws of Luxembourg. The directors and executive officers of Ipsen Pharma are Christophe Jean, Director; Claude Bertrand, Director; Etienne De Blois, Director; Philippe Robert-Gorsse, Director; Eric Drape, Director; Claire Giraut, Director; Jean Fabre, Director; Jean-Pierre Dubuc, Director; Didier Veron, Director; and Marc De Garidel, President. The directors of Ipsen are Marc De Garidel, Director and Chief Executive Officer; Anne Beaufour, Director; Henri Beaufour, Director; Hervé Couffin, Director; Antoine Flochel, Director; Gérard Hauser, Director; Pierre Martinet, Director; René Merkt, Director; Yves Rambaud, Director; Klaus-Peter Schwabe, Director and Christophe Vérot, Director. The executive officers of Ipsen are Claire Giraut, Etienne de Blois, Christophe Jean, Claude Bertrand, and Eric Drape. The directors of Mayroy are Anne Beaufour, Antoine Flochel, Beech Tree SA, Bee Master B.V. Holding BV, Henri Beaufour, Klaus Peter Schwabe, and Jean-Pierre Diehl. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on June 23, 2011 by Ipsen Pharma and Ipsen.

(38)

Includes 64,430 shares of Common Stock issuable upon conversion of 6,443 shares of Company Series A-5 Preferred Stock held by Nordic Bioscience Clinical Development VII A/S ("Nordic VII"). Nordic VII beneficially owns 0.40% of the Fully-Diluted Shares. Nordic VII is a wholly-owned subsidiary of Nordic Bioscience Clinical Development A/S ("Nordic A/S"). Nordic A/S is wholly-owned subsidiary of Nordic Bioscience Holding A/S ("Nordic Holding"). Nordic Holding is majority owned by C.C. Consulting A/S ("C.C. Consulting"). Claus Chrstiansen, MD, and Bente Riis Chrstiansen each own 50% of C.C. Consulting. The entities and individuals mentioned above disclaim beneficial ownership of the share except to the extent of their pecuniary interest therein. Beneficial ownership information is based on information known to the Company and a Schedule 13D filed with the SEC on June 17, 2011 by Nordic VII.

(39)

Includes 8,961 shares of Common Stock held by Mr. Katzenellenbogen. Mr. Katzenellenbogen is the trustee of the Katzenellenbogen Trust. The Katzenellenbogen Trust may be deemed to beneficially own the shares held by Mr. Katzenellenbogen.

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

There is not currently, and there has never been, any market for any of our securities. Our securities are not eligible for trading on any national securities exchange, the Nasdaq or other over-the-counter markets, including the OTC Bulletin Board®.

Table of Contents

USE OF PROCEEDS

We will not receive any proceeds from the resale of any of the shares offered by this prospectus by the selling stockholders. With respect to the underlying shares being offered hereby, we would receive gross proceeds of approximately $320,551 assuming the exercise of all warrants for cash. To the extent any of these warrants are exercised, we intend to use the proceeds to for general working capital and administrative functions. The warrants are exercisable on a cashless basis and the warrant holders are not required to exercise the warrants, accordingly, there is no guarantee that we will receive any cash from the exercise of warrants.

DETERMINATION OF OFFERING PRICE

All shares being offered will be sold by existing stockholders without our involvement, consequently the actual price of the stock will be $8.142 until our common stock is eligible for trading on a national securities exchange, Nasdaq or the OTC Bulletin Board. At and after such time, the actual price of the stock will be determined by prevailing market prices at the time of sale or by private transactions negotiated by the selling stockholders and the independent decisions of the selling stockholders.

SELLING STOCKHOLDERS

This prospectus covers the resale by the selling stockholders identified below of 5,320,600 shares of our Common Stock, including 195,552 shares of our Common Stock currently outstanding, 5,112,120 shares issuable upon conversion of Preferred Stock, and 12,928 shares issuable upon the exercise of warrants and conversion of the underlying securities.

The following table sets forth the number of shares of our Common Stock beneficially owned by the selling stockholders as of October 6, 2011, and after giving effect to this offering. To our knowledge, other than as indicated in the footnotes to table below, none of the selling stockholders are broker-dealers or affiliates of broker-dealers. No broker-dealer received shares of Preferred Stock or Common Stock, or warrants to purchase any shares of our Capital Stock as compensation for underwriting services. Each affiliate of a broker-dealers purchased their shares in the ordinary course of their business and at the time of each purchase of shares offered hereby, no selling stockholder had any agreement or understanding, directly or indirectly, with any person to distribute those shares.

Selling Stockholder	Shares Owned Before Offering(a)	Number of Outstanding Shares of Common Stock Offered by Selling Stockholder	Number of Shares of Common Stock Issuable Upon Conversion of Outstanding Shares of Preferred Stock Offered by Selling Stockholder	Number of Shares of Common Stock Offered by Selling Stockholder upon Exercise of Certain Warrants	Number of Shares of Common Stock Offered by Selling Stockholder Registered Hereunder	Percentage Ownership After Offering(a)
MPM Bioventures III, L.P.(1)	234,010		77,220		77,220	1.45%
MPM Bioventures III-QP, L.P.(1)	3,480,490		1,148,560		1,148,560	21.59%
MPM Bioventures III GMBH & Co. Beteiligungs KG(1)	294,140		97,070		97,070	1.82%
MPM Bioventures III Parallel Fund, L.P.(1)	105,100		34,680		34,680	0.00%*

Table of Contents

Selling Stockholder	Shares Owned Before Offering(a)	Number of Outstanding Shares of Common Stock Offered by Selling Stockholder	Number of Shares of Common Stock Issuable Upon Conversion of Outstanding Shares of Preferred Stock Offered by Selling Stockholder	Number of Shares of Common Stock Offered by Selling Stockholder upon Exercise of Certain Warrants	Number of Shares of Common Stock Offered by Selling Stockholder Registered Hereunder	Percentage Ownership After Offering(a)
MPM Asset Management Investors 2003 BVIII LLC(1)	67,380		22,230		22,230	0.00%*
MPM Bio IV NVS Strategic Fund, L.P.(1)	2,382,430		786,200		786,200	14.78%
The Wellcome Trust Limited, as Trustee of The Wellcome Trust	2,358,470		778,290		778,290	14.63%
HealthCare Ventures VII, L.P.(2)	1,899,033	27,427	599,260		626,687	11.78%
OBP IV Holdings LLC(3)	1,513,413	5,007	494,410		499,417	9.39%
mRNA Fund II Holdings LLC(3)	15,171	50	4,960		5,010	0.00%*
BB Biotech Ventures II, L.P.(4)	1,487,580		490,900		490,900	9.23%
Healthcare Private Equity Limited Partnership(5)	628,910		207,540		207,540	3.90%
Dr. Raymond F. Schinazi	26,950		8,900		8,900	0.00%*
David E. Thompson Revocable Trust	18,150		5,990		5,990	0.00%*
Hostetler Family Trust	3,071	1,013			1,013	0.00%*
H.Watt Gregory, III	12,270		4,050		4,050	0.00%*
The Richman Trust dated 2/6/83	6,000		1,980		1,980	0.00%*
The Breining Family Trust dated August 15, 2003	3,750		1,240		1,240	0.00%*
Dr. Dennis A. Carson	533	176			176	0.00%*
Bronson Van Wyck	363	120			120	0.00%*
The Jonnie K. Westbrook Revocable Trust, Dated March 17, 2000	363	120			120	0.00%*
Nordic Bioscience Clinical Development VII A/S(6)	64,430		21,260		21,260	0.00%*
Brookside Capital Partners Fund, L.P.(7)	409,400		135,100		135,100	2.54%
Biotech Growth N.V.(8)	409,400		135,100		135,100	2.54%
Ipsen Pharma SAS(9)	173,260		57,180		57,180	1.07%
GE Capital Equity Investments, Inc.(10)	15,350			5,070	5,070	0.00%*
Oxford Finance LLC(11)	15,350			5,070	5,070	0.00%*
Leerink Swann LLC(17)	8,180			2,700	2,700	0.00%*
Stavros C. Manolagas	91,040	30,043			30,043	0.00%*
Dr. Michael Rosenblatt	82,714	27,296			27,296	0.00%*
Dr. John Potts, Jr and Susanne K. Potts Irrevocable Trust for Stephen K. Potts dated 6-15-05	20,291	6,696			6,696	0.00%*
Dr. John Thomas Potts, Jr.	4,496	1,484			1,484	0.00%*

Table of Contents

Selling Stockholder	Shares Owned Before Offering(a)	Number of Outstanding Shares of Common Stock Offered by Selling Stockholder	Number of Shares of Common Stock Issuable Upon Conversion of Outstanding Shares of Preferred Stock Offered by Selling Stockholder	Number of Shares of Common Stock Offered by Selling Stockholder upon Exercise of Certain Warrants	Number of Shares of Common Stock Offered by Selling Stockholder Registered Hereunder	Percentage Ownership After Offering(a)
John A. Katzenellenbogen Trust Under Agreement Dated August 2, 1999	40,438	13,345			13,345	0.00%*
John Katzenellenbogen, Ph.D.	8,961	2,957			2,957	0.00%*
Bart Henderson	30,468	10,054			10,054	0.00%*
Board of Trustees of the University of Arkansas	17,333	5,720			5,720	0.00%*
Sillicon Valley Bank(12)	266			88	88	0.00%*
Benjamin C. Lane	8,125	2,681			2,681	0.00%*
Ruff Trust	5,124	1,691			1,691	0.00%*
H2 Enterprises, LLC(13)	5,124	1,691			1,691	0.00%*
Dr. Karl Y. Hostetler	5,124	1,691			1,691	0.00%*
Stavroula Kousteni, Ph.D.	421	139			139	0.00%*
Robert L. Jilka, Ph.D.	572	189			189	0.00%*
Dr. Robert S. Weinstein	421	139			139	0.00%*
Teresita M. Bellido, Ph.D.	234	77			77	0.00%*
Dotty Paquin	891	294			294	0.00%*
Thomas E. Sparks, Jr.	883	291			291	0.00%*
Samuel Ho	833	275			275	0.00%*
Charles O'Brien, Ph.D.	140	46			46	0.00%*
Dr. Alwyn Michael Parfitt	280	92			92	0.00%*
Barnette Pitzele	266	88			88	0.00%*
Benita S. Katzenellenbogen, Ph.D.	187	62			62	0.00%*
Kelly Colbourn	102	34			34	0.00%*
Julie Glowacki, Ph.D.	93	31			31	0.00%*
Dr. Socrates E. Papapoulos	93	31			31	0.00%*
Tonya Goss	66	22			22	0.00%*
The Kent C. Westbrook Revocable Trust Dated March 17, 2000	46	15			15	0.00%*
Maysoun Shomali	2,383	786			786	0.00%*
Jonathan Guerriero	2,500	825			825	0.00%*
C. Richard Lyttle(14)	66,666	22,000			22,000	0.00%*
Louis O'Dea(15)	29,207	9,638			9,638	0.00%*
B. Nicholas Harvey(16)	30,000	9,900			9,900	0.00%*
Chris Miller	33,355	11,007			11,007	0.00%*
Kelly Sullivan	937	309			309	0.00%*
TOTALS:	16,123,027	195,552	5,112,120	12,928	5,320,600	

* Less than 1%.

(a) Assumes the conversion or exercise of all outstanding shares of Preferred Stock and warrants, respectively, held by such selling stockholder and assumes the sale of all shares offered.

(1) MPM BioVentures III GP, L.P. and MPM BioVentures III LLC ("BV III LLC") are the direct and indirect general partners of MPM BioVentures III-QP, L.P., MPM BioVentures III, L.P., MPM BioVentures III Parallel

Table of Contents

Fund, L.P. and MPM BioVentures III GmbH & Co. Beteiligungs KG. MPM BioVentures IV GP LLC ("BV IV LLC") and MPM BioVentures IV LLC are the direct and indirect general partners of MPM Bio IV NVS Strategic Fund, L.P. Dr. Gadicke as a Series A member of BV III LLC, a manager of MPM Asset Management Investors 2003 BVIII LLC and a member of BV IV LLC, has voting and dispositive control over the shares held by such selling stockholders. Each entity mentioned above and Dr. Gadicke disclaim beneficial ownership of all shares not held by it or him of record.

(2)

HealthCare Partners VII, L.P. ("HCPVII") is the General Partner of HealthCare Ventures VII, L.P. The General Partners of HCPVII are James H. Cavanaugh PhD, Harold R. Werner, John W. Littlechild, Christopher Mirabelli, PhD, and Augustine Lawlor.

(3)

Jonathan Fleming, as an individual general partner of OBP Management IV L.P., the sole general partner of Oxford Bioscience Partners IV L.P. ("OBP IV") and mRNA Fund II L.P. ("mRNA II"), who are each members of the selling stockholder, has voting and dispositive control over the shares held by such selling stockholder. Both OBP IV and mRNA II are affiliates of a broker dealer. Mr. Fleming disclaims beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the shares held by such selling stockholder to the extent that he has no actual pecuniary interest therein.

(4)

BB Biotech Ventures GP (Guernsey) Limited ("BBBV Limited") is the general partner of the selling stockholder. Martin Muenchbach, as the Senior Investment Advisor Private Equity at Bellevue Asset Management AG ("BAM AG"), who advises Asset Management BAB N.V., who, pursuant to a services agreement with BAM AG, advises the directors of BBBV Limited, may be deemed to have voting and dispositive control over the shares held by such selling stockholders. Dr. Muenchbach disclaims ownership of all shares not held by him of record.

(5)

Healthcare Private Equity Limited Partnership ("HPELP") is a limited partnership which has one general partner, Waverley Healthcare Private Equity Limited ("Waverley GP") and one limited partner, Scottish Widows plc. As general partner, Waverley GP has authority under the HPELP limited partnership agreement ("LPA") to conduct and manage the business of HPELP. The directors of Waverley GP are Andrew November and Archie Struthers. The controlling shareholder of Waverley GP is SWIP Group Limited. The ultimate controlling entity of SWIP Group Limited is Lloyds Banking Group plc, a public listed company with many shareholders. The board of directors of Lloyds Banking Group plc consists of nine non-executive directors (Sir Winifried Bischoff, Lord Leitch, Anita Frew, Glen Moreno, David Roberts, T Timothy Ryan Jnr, Martin Scicluna and Anthony Watson) and three executive directors (Antonito Horta-Osorio, G Truett Tate and Tim Tookey). The Chairman (Sir Winifried Bischoff) is responsible for leadership of the board. The Group Chief executive (Antonio Horto-Osorio) is responsible for the day to day management of the business of Lloyds Banking Group plc, in accordance with the strategy and long term objectives approved by the board.

(6)

Nordic Bioscience Clinical Development VII A/S ("Nordic VII") is a wholly-owned subsidiary of Nordic Bioscience Clinical Development A/S ("Nordic A/S"). Nordic A/S is wholly-owned subsidiary of Nordic Bioscience Holding A/S ("Nordic Holding"). Nordic Holding is majority owned by C.C. Consulting A/S ("C.C. Consulting"). Claus Chrstiansen, MD, and Bente Riis Chrstiansen each own 50% of C.C. Consulting. The entities and individuals mentioned above disclaim beneficial ownership of the share except to the extent of their pecuniary interest therein.

(7)

Brookside Capital Investors, L.P. ("Brookside Investors") is the sole general partner of Brookside Capital Partners Fund, L.P. Brookside Capital Management, LLC is the sole general partner of Brookside Investors. Beneficial ownership information is based on information known to the Company. Brookside Capital Partners Fund, L.P. The control persons of Brookside Capital Management are Executive Committee members: Dewey J. Awad, Domenic J. Ferrante, Matthew V. McPherron, William E. Pappendick IV, John M. Toussaint.

(8)

BB Biotech Growth N.V. ("BB Growth") is a wholly-owned subsidiary of BB Biotech AG ("BB Biotech"). The directors and executive officers of BB Biotech are Dr. Thomas D. Szucs, Chairman and Director; Dr. Clive Meanwell, Vice Chairman and Director; and Dr. Erich Hunziker, Director. The directors and executive officers of BB Growth are Dr. Thomas D. Szucs, Statutory Director; Deanna Chemaly, Statutory Director; and Hugo Jan van Neutegem, Statutory Director.

(9)

Ipsen Pharma SAS ("Ipsen Pharma") is a société par actions simplifiée organized under the laws of France and is a wholly-owned subsidiary of Ipsen S.A. ("Ipsen"), a société anonyme organized under the laws of France. Ipsen's majority shareholder is Mayroy, a société anonyme organized under the laws of Luxembourg. The directors and executive officers of Ipsen Pharma are Christophe Jean,

Director; Claude Bertrand, Director; Etienne De Blois, Director; Philippe Robert-Gorsse, Director; Eric Drape, Director; Claire Giraut, Director; Jean Fabre, Director; Jean-Pierre Dubuc, Director; Didier Veron, Director; and Marc De Garidel,

Table of Contents

President. The directors of Ipsen are Marc De Garidel, Director and Chief Executive Officer; Anne Beaufour, Director; Henri Beaufour, Director; Hervé Couffin, Director; Antoine Flochel, Director; Gérard Hauser, Director; Pierre Martinet, Director; René Merkt, Director; Yves Rambaud, Director; Klaus-Peter Schwabe, Director and Christophe Vérot, Director. The executive officers of Ipsen are Claire Giraut, Etienne de Blois, Christophe Jean, Claude Bertrand, and Eric Drape. The directors of Mayroy are Anne Beaufour, Antoine Flochel, Beech Tree SA, Bee Master B.V. Holding BV, Henri Beaufour, Klaus Peter Schwabe, and Jean-Pierre Diehl.

(10)

GE Capital Equity Investments, Inc. is a wholly owned subsidiary of General Electric Capital Corporation ("GECC"). GECC is an "affiliate" of a "member" of FINRA (Financial Industry Regulatory Authority). GECC is a wholly owned subsidiary of General Electric Capital Services, Inc. ("GECS"). GECS, in turn, is wholly owned directly and indirectly by General Electric Company ("GE"), a public company whose shares are listed on the New York Stock Exchange. GE Capital Markets, Inc. is a wholly owned subsidiary of GECC and is also a registered broker-dealer with the SEC and a member of FINRA. GE Investment Distributors, Inc. is an SEC registered broker-dealer and a member of FINRA. GE Asset Management, Inc. ("GEAM") owns 100% of the common stock of GE Investment Distributors, Inc. GEAM is a direct, wholly-owned-subsidiary of GE.

(11)

Oxford Finance LLC is a single-member limited liability company, whose sole member is Oxford Holdco LLC. Under its limited liability company agreement, the business affairs and activities of Oxford Holdco LLC are directed by and controlled by its board of directors. The Oxford Holdco LLC board of directors is composed of three directors appointed by Sumitomo Corporation (Tetsu Egushi, Kentaro Hori and Rishi Gaind), three directors appointed by Welsh Carson Anderson & Stowe (Sean M. Traynor, Thomas A. Scully, and Chris W. Solomon) and J. Alden Philbrick, IV, the President and CEO of Oxford Finance LLC. By action of its sole member, Oxford Finance LLC has established a Credit Committee composed of its President and CEO, its Chief Operating officer and its Senior Vice President, Credit and Portfolio. These positions are currently held by Mr. Philbrick, Timothy A. Lex and Hans S. Houser, respectively. The Oxford Finance LLC Credit Committee is authorized to make all decisions concerning the investments of Oxford Finance LLC including, without limitation, any sale or exercise of the warrants owned by it and, if exercised, any sale of the shares of Radius resulting from such exercise.

(12)

SVB Financial Group is a reporting public company. SVB Financial Group is an affiliate of a broker-dealer. Through the authority delegated by SVB Financial Group's Finance Committee of the Board of Directors, Michael D. Kruse, Treasurer of SVB Financial Group, has voting and dispositive power over these shares.

(13)

The members of H2 Enterprises, LLC are H. Watt Gregory, III and Nancy L. Gregory. H. Watt Gregory, III is the managing member.

(14)

The selling stockholder is one of our Directors and is our President and Chief Executive Officer.

(15)

The selling stockholder is one of our Senior Vice Presidents and is our Chief Medical Officer.

(16)

The selling stockholder is one of our Senior Vice Presidents and is our Chief Financial Officer, Treasurer and Secretary.

(17)

Leerink Swann LLC is a registered broker dealer. Leerink received the warrants exercisable for shares of Series A-1 Stock as compensation for placement agent services provided to the Former Operating Company in the Series A-1 Private Placement prior to the Merger. Leerink Swan LLC is owned by Leerink One Holdings LLC. Leerink Massachusetts Business Trust holds voting control of Leerink One Holdings LLC and Jeffrey Albert Leerink holds voting control of Leerink Massachusetts Business Trust.

Table of Contents

PLAN OF DISTRIBUTION

We are registering the shares offered by this prospectus on behalf of the selling stockholders. The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of Common Stock or interests in shares of Common Stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of Common Stock or interests in shares of Common Stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short sales;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of Common Stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Common Stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of Common Stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our Common Stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Common Stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our Common Stock short and deliver these securities to close out their short positions, or loan or pledge the Common Stock to broker-dealers that in turn may sell these securities. The selling stockholders may also

enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

Table of Contents

The aggregate proceeds to the selling stockholders from the sale of the Common Stock offered by them will be the purchase price of the Common Stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of Common Stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any broker-dealers that act in connection with the sale of the shares offered hereby might be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, and any commissions received by such broker-dealers and any profit on the resale of the securities sold by them while acting as principals might be deemed to be underwriting discounts or commissions under the Securities Act.

To the extent required, the shares of our Common Stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the Common Stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the Common Stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement or (2) the date on which the shares may be sold pursuant to Rule 144 of the Securities Act.

Shares Eligible For Future Sale

Upon completion of this offering and assuming the issuance of all of the shares covered by this prospectus that are issuable upon the exercise or conversion of convertible securities, there will be 16,123,027 shares of our Common Stock issued and outstanding. The shares purchased in this offering will be freely tradable without registration or other restriction under the Securities Act, except for any shares purchased by an "affiliate" of our company (as defined in the Securities Act).

Our currently outstanding shares that were issued in reliance upon the "private placement" exemptions provided by the Act are deemed "restricted securities" within the meaning of Rule 144.

Table of Contents

Restricted securities may not be sold unless they are registered under the Securities Act or are sold pursuant to an applicable exemption from registration, including an exemption under Rule 144 of the Securities Act.

In general, under Rule 144 as currently in effect, any person (or persons whose shares are aggregated) including persons deemed to be affiliates, whose restricted securities have been fully paid for and held for at least one year from the later of the date of issuance by us or acquisition from an affiliate, may sell such securities in broker's transactions or directly to market makers, provided that the number of shares sold in any three month period may not exceed the greater of one percent of the then-outstanding shares of our Common Stock or the average weekly trading volume of our shares of Common Stock in the over-the-counter market during the four calendar weeks preceding the sale. Sales under Rule 144 are also subject to certain notice requirements and the availability of current public information about our company. After two years have elapsed from the later of the issuance of restricted securities by us or their acquisition from an affiliate, such securities may be sold without limitation by persons who are not affiliates under the rule.

In the Merger, we assumed the Incentive Plan and all options to acquire Common Stock of the Former Operating Company issued thereunder. Under the plan, the Company is authorized to issue incentive stock options, nonstatutory stock options, rights, incentive stock grants, performance stock grants and restricted stock. Only incentive stock options and non-statutory stock options have been granted under the plan. We have 1,281,966 options issued and unexercised, 1,052,545 of which are vested. The Company has the right to issue additional awards under the plan for an aggregate of 315,923 shares of Common Stock. If an option or right expires or terminates for any reason (other than termination by virtue of the exercise of a related option or related right, as the case may be) without having been fully exercised, if shares of restricted stock are forfeited, or if shares covered by an incentive share award or performance award are not issued or are forfeited, the unissued or forfeited shares that had been subject to the award become available for the grant of additional awards.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock being registered herein is a summary only and is qualified in its entirety by reference to our Certificate of Incorporation, as amended, By-Laws, as amended, and the Stockholders' Agreement which are included as Exhibits 3.1, 3.2 and 4.1, respectively, of this Registration Statement.

General

As of the date of this prospectus we have authorized capital of 110,000,000 shares, of which 100,000,000 are designated as Common Stock, and 10,000,000 shares are Preferred Stock, of which 1,000,000 are currently designated as Series A-1 Preferred Stock, 983,213 are currently designated as Series A-2 Preferred Stock, 142,230 are currently designated as Series A-3 Preferred Stock, 4,000 are currently designated as Series A-4 Preferred Stock, 7,000 are currently designated as Series A-5 Preferred Stock, and 800,000 are currently designated as Series A-6 Preferred Stock. As of the date of this prospectus we have outstanding 592,581 shares of Common Stock and 1,549,130 shares of Preferred Stock, of which 413,254 shares are Series A-1 Stock; 983,208 shares are Series A-2 Stock; 142,227 shares are Series A-3 Stock; 3,998 shares are Series A-4 Stock; and 6,443 shares are Series A-5 Stock, such outstanding Common Stock is held by 42 holders of record, and upon conversion of the issued and outstanding Preferred Stock, would be held by 60 holders of record. Assuming the conversion of the outstanding Preferred Stock, the number of shares of Common Stock outstanding would be 16,083,881. Additionally, we have outstanding three preferred stock purchase warrants (the "Preferred Stock Purchase Warrants") that entitle the holders to purchase an aggregate of 3,888 shares of Series A-1 Stock at $81.42 per share and one common stock purchase warrant (the "Common Stock

Table of Contents

Purchase Warrant") that entitles the holder to purchase 266 shares of Common Stock at $15.00 per share.

Additionally, there are 1,319,682 options issued pursuant to the Inventive Plan that are exercisable into an aggregate of 1,319,682 shares of Common Stock. A total of 2,015,666 shares of Common Stock are available under the Incentive Plan. We plan to file a Form S-8 with the SEC in order to register the 2,015,666 available under the Incentive Plan.

Dividend Rights

Holders of shares of Series A-1 Shares are entitled to receive dividends at a rate of 8% per annum, compounding annually, which accrue on a quarterly basis commencing on the date of issuance of the shares of Series A-1 Shares. Dividends are payable, as accrued, upon liquidation, event of sale, and conversion to common stock. The holders of shares of Series A-1 Shares are also entitled to dividends declared or paid on any shares of Common Stock.

Following payment in full of required dividends to the holders of Series A-1 Shares, holders of Series A-2 Shares are entitled to receive dividends at a rate of 8% per annum, compounding annually, which accrue on a quarterly basis commencing on the date of issuance of the Series A-2 Shares. Dividends are payable, as accrued, upon liquidation, event of sale, and conversion to common stock. The holders of Series A-2 Shares are also entitled to dividends declared or paid on any shares of Common Stock.

Following payment in full of required dividends to the holders of Series A-1 Shares and Series A-2 Shares, holders of Series A-3 Shares are entitled to receive dividends at a rate of 8% per annum, compounding annually, which accrue on a quarterly basis commencing on the date of issuance of Series A-3 Shares.

Holders of Series A-5 Shares are entitled to receive the Series A-5 Special Accruing Dividend (as defined in the Certificate of Designations) which ranks senior in payment to any other dividends payable on any and all series of Preferred Stock and upon Liquidation (as defined in Section 4(b) of the Certificate of Designations) or an Event of Sale (as defined in Section 5 of Certificate of Designations).

Holders of Series A-6 Shares are entitled to receive dividends on Series A-6 Shares, when and if declared by the Board of Directors at a rate to be determined by the Board of Directors. Dividends are payable, as accrued, upon liquidation, event of sale and conversion to Common Stock.

The holders of shares of Series A-3 Shares, A-5 Shares and A-6 Shares are also entitled to dividends declared or paid on any shares of Common Stock. Following payment in full of required dividends to the holders of Series A-1 Shares, Series A-2 Shares, Series A-3 Shares, and Series A-5 Shares, holders of Series A-4 Shares are entitled to receive dividends on shares of Series A-4 Shares, when and if declared by the Board of Directors at a rate to be determined by the Board of Directors. Dividends are payable, as accrued, upon liquidation, event of sale, and conversion to Common Stock. The holders of shares of Series A-4 Shares are also entitled to dividends declared or paid on any shares of Common Stock.

Dividends on the Preferred Stock are payable, at the sole discretion of the Board of Directors, in cash or in shares of the Common Stock, when and if declared by the Board of Directors, upon liquidation or upon an event of sale. Upon conversion, dividends are payable shares of the common stock.

Table of Contents

Terms of Conversion

Each share of Preferred Stock is convertible into shares of Common Stock at any time at the election of the holder thereof in an amount equal to the original purchase price of $81.42 divided by the then prevailing conversion price as determined in our Certificate of Incorporation and Certificate of Designations. The current conversion price is equal to $8.142 and, accordingly, each share of Preferred Stock is initially convertible into ten shares of Common Stock. The conversion price shall be adjusted from time to time in accordance with our Certificate of Incorporation and Certificate of Designations which provide for a reduction of the conversion price upon the issuance by us of our securities, other than Excluded Stock (as defined in the Certificate of Designations), at a consideration per share less than the conversion price in effect immediately prior to the issuance. If the conversion price is reduced, each share of Preferred Stock will be convertible into a greater number of shares of our Common Stock. The exact number of shares of our Common Stock into which a share of Preferred Stock would be convertible is determined by the reduction in the conversion price which is required to be calculated on a weighted average basis to take into account the magnitude of the dilutive effect of the newly issued shares at the lower purchase price.

In addition, pursuant to our Certificate of Incorporation, the Preferred Stock shall convert into Common Stock upon (i) an election to convert made by the Senior Majority or (ii) the listing of the Common Stock on a national securities exchange.

In the event an investor does not timely and completely fulfill their future obligations as defined in the Original Purchase Agreement (i) the shares of Preferred Stock then held by the investor automatically convert into our Common Stock at a rate of one share of Common Stock for every ten shares of Preferred Stock to be converted and (ii) we have the right to repurchase all the shares of Common Stock issued upon conversion at a purchase price equal to the par value of the repurchased shares of Common Stock.

Voting Rights

The Preferred Stock entitles each holder thereof to one vote for each share of Common Stock into which such share of Preferred Stock is convertible, voting together with the Common Stock as a single class, except with respect to certain amendments to the Certificate of Designations, authorization or issuance of any new class or series of senior or parity capital stock (subject to certain exceptions), any liquidation, dissolution or winding up of the Company which require the consent of the Senior Majority. Initially each share of Preferred Stock is convertible into ten shares of Common Stock, and, therefore, each holder of Preferred Stock is entitled to ten votes for every share of Preferred Stock held by them.

Board of Directors

Pursuant to the Stockholders' Agreement and our Certificate of Incorporation:

(i) for so long as any shares of Series A-1 Stock are outstanding, the holders of a majority of the shares of Series A-1 Stock outstanding, voting as a separate class, shall have the right to elect two members of the Board of Directors;

(ii) The G3 Holders voting as a separate class shall have the right to elect one member of the Board of Directors of the Corporation by majority vote of the shares of Series A-1 Stock held by them; provided, however, that in order to be eligible to vote or consent with respect to the election of such member of the Board of Directors, a G3 Holder together with members of such G3 Holders' Group must hold greater than (20%) of the shares of Series A-1 Stock purchased under the Series A-1 Stock Purchase Agreement by such G3 Holder and the members of such G3 Holders' Group; and

Table of Contents

(iii) MPM Capital L.P., voting as a separate class, shall have the right to elect one member of the Board of Directors of the Corporation by majority vote of the shares of Series A-1 Stock held by MPM Capital L.P.; provided that such member of the Board of Directors shall be an individual with particular expertise in the development of pharmaceutical products; and, provided, further, that in order to be eligible to vote or consent with respect to the election of such member of the Board of Directors, MPM Capital L.P. together with members of the MPM Group (as defined in the Stockholders' Agreement) must hold greater than twenty percent (20%) of the shares of Series A-1 Stock purchased under the Series A-1 Stock Purchase Agreement by MPM Capital L.P. and the members of the MPM Group.

The balance of the board is elected by all of the stockholders acting as a single class and voting on an as converted basis.

Anti-dilution Protection

All shares of Preferred Stock shall have weighted-average anti-dilution protection (based on the initial conversion purchase price of $8.142 per share) and anti-dilution protection upon the occurrence of any subdivision or combination of the Common Stock, stock dividend and other distribution, reorganization, reclassification or similar event affecting the Common Stock, subject to certain exceptions.

Preemption Rights

Under the terms of the Stockholders' Agreement, we are obligated to offer the holders of the Series A-1 Stock, the Series A-2 Stock and the Series A-3 Stock a right of first refusal with respect future equity issuances, subject to customary exceptions.

Indemnification

The Stockholders' Agreement contains customary cross-indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to us, and the selling stockholders are obligated to indemnify the us for material misstatements or omissions attributable to them.

Restrictions on Alienability

Pursuant to the Stockholders' Agreement, for a period of 180 days from May 17, 2011, all other parties subject to the Stockholders' Agreement have agreed, subject to certain exceptions, not to sell, assign, transfer, make a short sale of, loan, grant any option for the purchase of, or exercise registration rights with respect to any shares of Common Stock or other securities convertible into or exercisable for Common Stock, other than to a member of such Stockholders' Group (as defined in the Stockholders' Agreement). Notwithstanding the foregoing, on the 30th, 60th, 90th and 180th day after May 17, 2011, these restrictions shall cease to apply to 5%, 15%, 30% and 50%, respectively, of shares of Common Stock issued or issuable upon conversion of the Series A-1 Stock (the "Series A-1 Conversion Shares") held or issuable to such stockholder at such time. These restrictions do not apply to block trades of 10,000 shares or more of Series A-1 Conversion Shares or, if, on or at any time after any days indicated in the previous sentence, the average of the closing bid and ask price of the our Common Stock if quoted on any electronic quotation system, including but not limited to the OTC:BB for the five trading days ending on such date, or the average last-sale price of our Common Stock if listed on a national securities exchange for the five trading days ending on such date, is greater than $16.29 per share the percentages set forth in the previous sentence shall be doubled, except that, the Stockholders agreed that in no event shall a Stockholder be permitted, until the Company's Common Stock is listed on a national securities exchange, to sell, assign, transfer, make a short sale or, loan,

Table of Contents

grant any option for the purchase of, or exercise registration rights with respect to any Series A-1 Conversion Shares for a price less than $8.142 (subject to proportionate and equitable adjustment upon any stock split, stock dividend, reverse stock split or similar event that becomes effective after the date of this Agreement), except (i) with the prior written consent of the Company or (ii) to a member of such Stockholder's Group.

Registration Rights

Pursuant to the terms of the Stockholders' Agreement, on or before the 60th calendar day following the closing of the Merger, we are required to file a resale shelf registration statement (the "Resale Registration Statement") pursuant to Rule 415 of the Securities Act, covering the offering and resale of all of the Registrable Shares (meaning all of the Common Stock issued or issuable upon the conversion or exchange of the Preferred Stock). We are required to use reasonable best efforts to have the Resale Registration Statement declared effective by the 90th calendar day following the closing of the Merger unless we receive comments on the Resale Registration Statement from the SEC, in which case we shall use reasonable best efforts to have the Resale Registration Statement declared effective by the 180th calendar day following the closing of the Merger. In the event that the we are notified by the SEC that the Resale Registration Statement will not be reviewed or is no longer subject to further review and comments, we are required to use reasonable best efforts to have the Resale Registration Statement declared effective by the 5th trading day following such notification. We are required to use reasonable best efforts to keep the Resale Registration Statement continuously effective until all Registrable Shares have been sold or may be sold without volume limitations under Rule 144 promulgated under the Securities Act. In the event that any of these provisions are not complied with, as described in greater detail in the Stockholders' Agreement, on each such Event Date (as defined in the Stockholders' Agreement) and on each monthly anniversary of each such Event Date until such event is cured, the we are required to pay to each holder an amount in cash equal to one percent of the aggregate purchase price paid by such holder pursuant to the Purchase Agreement for any Registrable Securities (meaning the Preferred Stock) then held by such holder. The maximum aggregate liquidated damages payable to a holder under the Stockholders' Agreement is 16 percent of the aggregate purchase price paid by such holder pursuant to the Purchase Agreement. Interest accrues at the rate of 10 percent per annum on any unpaid liquidated damages.

Demand Registration Rights. At such time as the Resale Registration Statement is no longer effective, subject to specified exceptions, any party to the Stockholders' Agreement has the right to demand that we file an unlimited number of registration statements on Form S-3 covering the offering and sale of all or at least $1,000,000 worth of its Registrable Securities.

Piggyback Registration Rights. All parties to the Stockholders' Agreement have piggyback registration rights. Under these provisions, if we register any securities for public sale, other than pursuant to a registration statement on Form S-4, Form S-8 or Form S-1 (only in connection with an initial public offering), these stockholders will have the right to include their shares in the registration statement, subject to customary exceptions. The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement.

Expenses of Registration. We are responsible for paying all registration expenses, other than underwriting discounts and commissions, related to any demand or piggyback registration.

Share Purchase Warrants

The exercise price and number of shares of Common Stock and Preferred Stock issuable on exercise of the Common Stock Purchase Warrant and the Preferred Stock Purchase Warrants, respectively, may be adjusted in upon certain events that result in a change of the number and/or class

Table of Contents

of the securities issuable upon exercise or conversion of the applicable Warrants. The exercise period of each warrant expires ten years from the date such warrant was issued. The Preferred Stock Purchase Warrants may be exercised for cash or pursuant to standard cashless exercise provisions. To the extent not previously exercised, the Preferred Stock Purchase Warrants issued to GE and Oxford Finance, referred to herein as the Lender Warrants, shall be deemed to have been automatically exercised pursuant to the cashless exercise provision of such Lender Warrant as of immediately before its expiration, involuntary termination or cancellation if the then fair market value of a share issuable upon exercise of such Lender Warrant exceeds the warrant's exercise price, unless such automatic exercise is waived in writing prior the Lender to any such automatic exercise. To the extent not previously exercised the closing of any acquisition in which the consideration paid to the Company or stockholders is cash or cash equivalents, at the election of the holder of the Preferred Stock Purchase Warrants issued to Leerink and the Common Stock Purchase Warrants (all of which are issued to SVB Financial Group), the Company shall purchase the unexercised portion of any such warrant for cash for an amount equal to (a) the fair market value of any consideration that would have been received had such Leerink Warrant been exercised immediately before the record date for determining the shareholders entitled to participate in the proceeds of the acquisition, less (b) the aggregate exercise price of such warrant, but in no event less than zero.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law. This statute regulating corporate takeovers prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for three years following the date that the stockholder became an interested stockholder, unless:

prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

upon completion of the transaction that resulted in the interested stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers, and (b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

on or subsequent to the date of the transaction, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least $66^{2}/_{3}\%$ of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is any person who, together with such person's affiliates and associates (i) owns 15% or more of a corporation's voting securities or (ii) is an affiliate or associate of a corporation and was the owner of 15% or more of the corporation's voting securities at any time within the three year period immediately preceding a business combination of the corporation governed by Section 203. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may discourage takeover attempts that might result in a premium over the market price, once a market exists, for the shares of common stock held by our stockholders.

Table of Contents

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Pursuant to our Certificate of Incorporation and By-Laws, we may indemnify an officer or director who is made a party to any proceeding, because of his position as such, to the fullest extent authorized by Delaware General Corporation Law, as the same exists or may hereafter be amended. In certain cases, we may advance expenses incurred in defending any such proceeding.

To the extent that indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, we have been informed that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. If a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by a director, officer or controlling person of our company in the successful defense of any action, suit or proceeding) is asserted by any of our directors, officers or controlling persons in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of that issue.

ABOUT THIS PROSPECTUS

This prospectus is not an offer or solicitation in respect to these securities in any jurisdiction in which such offer or solicitation would be unlawful. This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission. The registration statement that contains this prospectus (including the exhibits to the registration statement) contains additional information about our company and the securities offered under this prospectus. That registration statement can be read at the SEC web site or at the SEC's offices mentioned under the heading "Where You Can Find More Information." We have not authorized anyone else to provide you with different information or additional information. You should not assume that the information in this prospectus, or any supplement or amendment to this prospectus, is accurate at any date other than the date indicated on the cover page of such documents.

WHERE YOU CAN FIND MORE INFORMATION

Federal securities law requires us to file information with the SEC concerning our business and operations. Accordingly, we file annual, quarterly, and special reports, proxy statements and other information with the SEC. You can inspect and copy this information at the Public Reference Facility maintained by the SEC at 100F Street, N.E., Washington, DC 20549. You can receive additional information about the operation of the SEC's Public Reference Facilities by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding companies that, like us, file information electronically with the SEC.

VALIDITY OF COMMON STOCK

Legal matters in connection with the validity of the shares offered by this prospectus will be passed upon by Bingham McCutchen LLP, Boston, Massachusetts.

EXPERTS

The financial statements of the Former Operating Company at December 31, 2010 and 2009, appearing in this Prospectus and Registration Statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report, given on the authority of such firm as experts in accounting and auditing.

Table of Contents

FINANCIAL STATEMENTS

Radius Health, Inc.

Index to Financial Statements

Contents

Report of Independent Registered Public Accounting Firm	F-2
Balance Sheets as of December 31, 2009 and 2010	F-3
Statements of Operations for the years ended December 31, 2009 and 2010	F-4
Statements of Convertible Preferred Stock, Redeemable Convertible Preferred Stock and Stockholders' Deficit for the years ended December 31, 2009 and 2010	F-5
Statements of Cash Flows for the years ended December 31, 2009 and 2010	F-6
Notes to Financial Statements	F-7
Balance Sheets as of June 30, 2011 and December 31, 2010 (unaudited)	F-28
Statements of Operations for the three and six months ended June 30, 2011 and 2010 (unaudited)	F-29
Statements of Convertible Preferred Stock, Redeemable Convertible Preferred Stock and Stockholders' Deficit for the six months ended June 30, 2011 and 2010 (unaudited)	F-30
Statements of Cash Flows for the six months ended June 30, 2011 and 2010 (unaudited)	F-32
Notes to Financial Statements (unaudited)	F-33

Table of Contents

Report of Independent Registered Public Accounting Firm

The Board of Directors
Radius Health, Inc.

We have audited the accompanying balance sheets of Radius Health, Inc. (the Company) as of December 31, 2009 and 2010, and the related statements of operations, convertible preferred stock, redeemable convertible preferred stock and stockholders' deficit, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Radius Health, Inc. at December 31, 2009 and 2010, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Boston, Massachusetts

May 11, 2011, except for the second and third
paragraphs of Note 14 as to which the
date is August 31, 2011

Table of Contents

Radius Health, Inc.

Balance Sheets

(in thousands, except share and per share amounts)

	December 31, 2009	December 31, 2010
Assets		
Current assets:		
Cash and cash equivalents	$ 7,896	$ 10,582
Marketable securities	23,826	7,969
Prepaid expenses and other current assets	149	282
Total current assets	31,871	18,833
Property and equipment, net	135	31
Other assets	78	105
Total assets	$ 32,084	$ 18,969
Liabilities, convertible preferred stock, redeemable convertible preferred stock and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 708	$ 614
Accrued expenses	1,280	2,771
Total current liabilities	1,988	3,385
Commitments and contingencies (*Note 7*)		
Series A Junior Convertible Preferred Stock, $.0001 par value; 63,000 shares authorized, 61,664 shares issued and outstanding (liquidation value $925)	93	93
Series B Redeemable Convertible Preferred Stock, $.0001 par value; 1,600,000 shares authorized, 1,599,997 shares issued and outstanding at liquidation value	35,470	38,309
Series C Redeemable Convertible Preferred Stock, $.0001 par value; 10,146,629 shares authorized, issued and outstanding at liquidation value	96,131	105,434
Stockholders' deficit:		
Common stock, $.0001 par value; 34,859,964 shares authorized, 320,424 and 322,807 shares issued and outstanding at December 31, 2009 and 2010, respectively		
Additional paid-in capital	3	3
Accumulated other comprehensive income (loss)	15	(3)
Accumulated deficit	(101,616)	(128,252)
Total stockholders' deficit	(101,598)	(128,252)
Total liabilities, convertible preferred stock, redeemable convertible preferred stock and stockholders' deficit	$ 32,084	$ 18,969

See accompanying notes.

Table of Contents

Radius Health, Inc.

Statements of Operations

(in thousands, except share and per share amounts)

	December 31,	
	2009	**2010**
Revenue:		
Option fee revenue	$ 1,616	$
Operating expenses:		
Research and development	14,519	11,692
General and administrative	2,668	3,630
Restructuring		217
Loss from operations	(15,571)	(15,539)
Interest income	489	85
Other income		883
Other expense	(7)	(59)
Net loss	(15,089)	(14,630)
Accretion of preferred stock	(11,405)	(12,143)
Net loss attributable to common stockholders	$ (26,494)	$ (26,773)
Net loss per share attributable to common stockholders:		
Basic and diluted	$ (82.68)	$ (83.42)
Weighted average shares outstanding, basic and diluted	320,437	320,920

See accompanying notes

Table of Contents

Radius Health, Inc.

Statements of Convertible Preferred Stock, Redeemable Convertible Preferred Stock and Stockholders' Deficit

(in thousands, except share and per share amounts)

	Series A Junior Convertible Preferred Stock		Series B Redeemable Convertible Preferred Stock		Series C Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance at December 31, 2008	61,664	$ 93	1,599,997	$ 32,843	10,146,629	$ 87,352	320,424	$	$ 8,013	$ 247	$ (83,256)	$ (74,996)
Net loss											(15,089)	(15,089)
Unrealized loss on marketable securities										(232)		(232)
Total comprehensive loss												(15,321)
Stock-based compensation expense									125			125
Accretion of Preferred Stock issuance costs						181			(181)			(181)
Accretion of Preferred Stock to redemption value				2,627		7,224			(7,954)		(1,897)	(9,851)
Accretion of Preferred Stock investor rights/obligations						1,374					(1,374)	(1,374)
Balance at December 31, 2009	61,664	93	1,599,997	35,470	10,146,629	96,131	320,424		3	15	(101,616)	(101,598)
Net loss											(14,630)	(14,630)
Unrealized loss on marketable securities										(18)		(18)
Total comprehensive loss												(14,648)
Issuance of Common Stock							2,383		2			2
Stock-based compensation expense									134			134
Accretion of Preferred Stock issuance costs						173			(136)		(37)	(173)
Accretion of Preferred Stock to redemption value				2,839		7,812					(10,651)	(10,651)
Accretion of Preferred Stock investor rights/obligations						1,318					(1,318)	(1,318)
Balance at December 31, 2010	61,664	$ 93	1,599,997	$ 38,309	10,146,629	$ 105,434	322,807	$	$ 3	$ (3)	$ (128,252)	$ (128,252)

See accompanying notes.

Table of Contents

Radius Health, Inc.

Statements of Cash Flows

(in thousands)

	Year Ended December 31,	
	2009	**2010**
Operating activities		
Net loss	$ (15,089)	$ (14,630)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	136	70
Gain on fixed asset disposal		(100)
Amortization of premium (accretion of discount) on short-term investments, net	98	303
Stock-based compensation expense	125	134
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	95	(133)
Other long-term assets		(27)
Accounts payable	(1,121)	(94)
Accrued expenses	(922)	1,491
Deferred revenue	(1,615)	
Net cash used in operating activities	(18,293)	(12,986)
Investing activities		
Purchases of property and equipment	(32)	(14)
Proceeds from sale of equipment		149
Purchases of marketable securities	(36,035)	(24,120)
Sales and maturities of marketable securities	53,690	39,655
Net cash provided by investing activities	17,623	15,670
Financing activities		
Proceeds from the sale of common stock		2
Payments on equipment financing	(8)	
Net cash (used in) provided by financing activities	(8)	2
Net (decrease) increase in cash and cash equivalents	(678)	2,686
Cash and cash equivalents at beginning of year	8,574	7,896
Cash and cash equivalents at end of year	$ 7,896	$ 10,582
Noncash financing activities		
Accretion of preferred stock issuance costs	$ 181	$ 173
Accretion of dividends on preferred stock	$ 9,850	$ 10,651
Accretion of preferred stock investor rights/obligations	$ 1,374	$ 1,318

See accompanying notes.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements

(in thousands except per share amounts)

1. Nature of Business

Radius Health, Inc. (the Company or Radius) is a pharmaceutical company focused on acquiring and developing new therapeutics for osteoporosis and women's health. The Company's lead product candidate is BA058 Injection which began a pivotal, multinational Phase 3 clinical study for the treatment of osteoporosis in April 2011. In addition, the Company is developing the BA058 Microneedle Patch, a transdermal form of BA058 that is based on a microneedle technology from 3M Drug Delivery Systems (3M) that commenced a Phase 1b clinical study in December 2010. In addition to BA058, the Company is currently conducting one other clinical and one other preclinical program. Since inception, the Company has devoted its efforts principally to research and development, licensing of intellectual property, business development activities, and raising capital.

The Company is subject to the risks associated with emerging, technology-oriented companies with a limited operating history, including dependence on key individuals, a developing business model, market acceptance of the Company's product candidates, competitive product candidates, and the continued ability to obtain adequate financing to fund the Company's future operations. Accumulated deficit for the period from November 14, 2003 (date of inception) through December 31, 2010 is $128,252. The Company has incurred, and expects to continue to incur, additional losses for the foreseeable future. The Company intends to obtain additional equity and/or debt financing in order to meet working capital requirements and to further develop its product candidates. Subsequent to December 31, 2010, the Company executed an agreement with existing and new investors under which it received an irrevocable, legally binding commitment for proceeds of $64,300 from the issuance of shares of Series A-1 convertible preferred stock in three closings which will take place in 2011. The proceeds from each closing are generally due to the Company upon written request. The Company intends to request the proceeds from such closings in 2011. The Company believes that its existing cash, cash equivalents and marketable securities and the proceeds available from the irrevocable legally binding commitment described above and in Note 14, are sufficient to finance its operations, including its 2011 obligations under the Nordic agreement described in Note 12, into 2012.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires the Company's management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Cash Equivalents

The Company considers all highly liquid investment instruments with an original maturity when purchased of three months or less to be cash equivalents. Cash equivalents at December 31, 2009 and 2010 comprise money market funds, corporate debt securities, asset-backed commercial paper, and debt securities held by government sponsored entities.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

2. Summary of Significant Accounting Policies (Continued)

Marketable Securities

All investment instruments with an original maturity date, when purchased, in excess of three months have been classified as current marketable securities. These marketable securities are classified as available-for-sale and such securities are carried at fair value. Unrealized gains and losses, if any, are included within other comprehensive income (loss) within stockholders' deficit. The amortized cost of debt securities in this category is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest income. Realized gains and losses on available-for-sale securities are included in interest income. The cost of securities sold is based on the specific identification method. The Company periodically reviews the portfolio of securities to determine whether an other-than-temporary impairment has occurred. No such losses have occurred to date. There were no realized gains or losses on the sale of securities for the years ended December 31, 2009 and 2010.

Fair Value Measurements

The fair value hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets (Level 1), and the lowest priority to unobservable inputs (Level 3). The Company's financial assets are classified within the fair value hierarchy based on the lowest level of input that is significant to the fair value measurement. The three levels of the fair value hierarchy, and its applicability to the Company's financial assets, are described below:

Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date of identical, unrestricted assets.

Level 2 Quoted prices for similar assets, or inputs that are observable, either directly or indirectly, for substantially the full term through corroboration with observable market data. Level 2 includes investments valued at quoted prices adjusted for legal or contractual restrictions specific to the security.

Level 3 Pricing inputs are unobservable for the asset, that is, inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset. Level 3 includes private investments that are supported by little or no market activity.

All of the Company's financial assets, comprising cash equivalents and marketable securities, are classified as Level 1 and Level 2 assets as of December 31, 2009 and 2010 (Note 4).

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, which include cash equivalents, marketable securities, accounts payable and accrued expenses, approximate their estimated fair values as of December 31, 2009 and 2010.

Concentrations of Credit Risk and Off-Balance-Sheet Risk

Financial instruments that potentially subject the Company to credit risk primarily consist of cash and cash equivalents and available-for-sale marketable securities. The Company maintains its cash and cash equivalents and marketable securities with financial institutions. The Company is currently

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

2. Summary of Significant Accounting Policies (Continued)

investing its excess cash in money market funds and other securities, and the management of these investments is not discretionary on the part of the financial institution. The Company's credit exposure on its marketable securities is limited by its diversification among United States government and agency debt securities. The Company has no significant off-balance-sheet risks such as foreign exchange contracts, option contracts, or other hedging arrangements.

Property and Equipment

Property and equipment is stated at cost and depreciated using the straight-line method over the estimated useful lives of the respective assets:

Furniture	3 years
Equipment	5 years
Software	3 years
Leasehold improvements	Shorter of lease or useful life of the asset

Revenue Recognition

To date, all of the Company's revenue has been generated under an option agreement. The Company recognized revenue ratably over the option period.

Research and Development

The Company accounts for research and development costs by expensing such costs to operations as incurred. Research and development costs primarily consist of personnel costs, outsourced research activities, laboratory supplies, and license fees.

Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are deferred and capitalized. The capitalized amounts will be expensed as the related goods are delivered or the services are performed. If expectations change such that the Company does not expect it will need the goods to be delivered or the services to be rendered, capitalized nonrefundable advance payments would be charged to expense.

Licensing Agreements

Costs associated with licenses of technology are expensed as incurred, and are included in research and development expenses.

Impairment of Long-Lived Assets

When impairment indicators exist, the Company's management evaluates long-lived assets for potential impairment. Potential impairment is assessed when there is evidence that events or changes in circumstances have occurred that indicate that the carrying amount of a long-lived asset may not be recovered. Recoverability of these assets is assessed based on undiscounted expected future cash flows from the assets, considering a number of factors, including past operating results, budgets and economic projections, market trends, and product development cycles. An impairment in the carrying

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

2. Summary of Significant Accounting Policies (Continued)

value of each asset is assessed when the undiscounted expected future cash flows derived from the asset are less than its carrying value.

Impairments, if any, are recognized in earnings. An impairment loss would be recognized in an amount equal to the excess of the carrying amount over the undiscounted expected future cash flows. No impairment charges have been recognized since inception.

Segment Information

Operating segments are defined as components of an enterprise engaging of business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one operating segment and the Company operates in one geographic segment.

Income Taxes

The liability method is used in accounting for income taxes. Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities, and are measured using the enacted tax rates in effect when the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance to reflect the uncertainty associated with their ultimate realization.

In July 2006, the FASB issued ASC No. 740-10, *Accounting for Uncertainty in Income Taxes.* ASC No.740-10 establishes a minimum threshold for financial statement recognition of the benefit of positions taken, or expected to be taken, in filing tax returns. ASC No. 740-10 requires the evaluation of tax positions taken, or expected to be taken, in the course of preparing the Company's tax returns to determine whether the tax positions are "more likely than not" of being sustained by the applicable tax authority. Tax positions not deemed to meet the more-likely-than-not threshold would be recorded as a tax expense. The Company's adoption of ASC No. 740-10 in 2009 did not have a material effect on the Company's financial statements.

Net Loss Per Common Share

Basic net loss per share is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common share equivalents outstanding for the period determined using the treasury-stock method. For purposes of this calculation, preferred stock, stock options and warrants are considered to be common stock equivalents and are only included in the calculation of diluted net loss per share when their effect is dilutive.

Redeemable Convertible Preferred Stock

The carrying value of the Company's Series B and Series C redeemable convertible preferred stock is adjusted by periodic accretions such that the carrying value will equal the redemption amount at the

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

2. Summary of Significant Accounting Policies (Continued)

redemption date. The carrying value is also adjusted to reflect dividends that accrue quarterly on the Series B and C redeemable convertible preferred stock (Note 9).

Stock-Based Compensation

The Company recognizes the compensation cost of employee stock-based awards using the straight-line method over the requisite service period of the award. During the years ended December 31, 2009 and 2010, the Company recorded approximately $100 and $100 of employee stock-based compensation expense, respectively. The Company estimates the fair value of each option award using the Black-Scholes-Merton option-pricing model. Weighted-average information and assumptions used in the option-pricing model for employee stock-based compensation are as follows.

	Years Ended	
	2009	**2010**
Expected dividend yield	0%	0%
Risk-free interest rates	2.6 - 2.7%	1.92%
Expected term (years)	6.25	6.25
Volatility	57 - 59%	58%

In calculating the estimated fair value of the Company's stock options, the Black-Scholes-Merton option-pricing model requires the consideration of the following six variables for purposes of estimating fair value:

The stock option exercise price,

The expected term of the option,

The grant date price of the Company's common stock, which is issuable upon exercise of the option,The expected volatility of the Company's common stock,

The expected dividends on the Company's common stock, and

The risk-free rate for the expected option term.

The expected term of the stock options granted represents the period of time that options granted are expected to be outstanding. For options granted prior to January 1, 2008, the expected term was calculated using the "simplified" method as prescribed by the SEC's Staff Accounting Bulletin No. 107, *Share-Based Payment*. For options granted after January 1, 2008, the Company calculated the expected term using similar assumptions. The expected volatility is a measure of the amount by which the Company stock price is expected to fluctuate during the term of the options granted. The Company determines the expected volatility based on a review of the historical volatility of similar publicly held companies in the biotechnology field over a period commensurate with the option's expected term. The Company has never declared or paid any cash dividends on its common stock and does not expect to do so in the foreseeable future. Accordingly, it uses an expected dividend yield of zero. The risk-free interest rate is the implied yield available on U.S. Treasury issues with a remaining life consistent with the option's expected term on the date of grant. The Company applies an estimated forfeiture rate to current period expense to recognize compensation

expense only for those awards expected to vest. The Company estimates forfeitures based upon historical data, adjusted for known trends, and will adjust

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

2. Summary of Significant Accounting Policies (Continued)

the estimate of forfeitures if actual forfeitures differ or are expected to differ from such estimates. Subsequent changes in estimated forfeitures are recognized through a cumulative adjustment in the period of change and also will impact the amount of stock-based compensation expense in future periods. The forfeiture rate was estimated to be 2.4% and 2.8% for the years ended December 31, 2009 and 2010, respectively.

Comprehensive Income (Loss)

The Company discloses all components of comprehensive income (loss) on an annual basis. Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. The Company's accumulated other comprehensive income (loss) comprises unrealized gains (losses) on its available-for-sale marketable securities.

Recently Issued Accounting Standards

In July 2009, the FASB ratified the EITF No. 08-1, *Revenue Arrangements with Multiple Deliverables*. This EITF provides additional guidance and clarification of ASC 605-25, (formerly EITF 00-21) regarding an entity's sale of products or services consisting of multiple deliverables for which, under certain circumstances, revenue may be recognized separately for each deliverable. This standard is effective for the Company beginning January 1, 2011. The Company does not believe that this standard will have a material impact on its financial statements, but it could impact the Company's revenue recognition on future collaboration agreements.

The Company considers events or transactions that occur after the balance sheet date but prior to the issuance of the financial statements to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure.

3. Net Loss Per Share

Basic and diluted net loss per share is calculated as follows:

	Year Ended December 31,	
	2009	**2010**
Numerator:		
Net loss	$ (15,089)	$ $(14,630)
Accretion of preferred stock	(11,405)	(12,143)
Net loss attributable to common stockholders	$ (26,494)	$ (26,773)
Denominator:		
Weighted-average number of common shares used in net loss per share-basic diluted	320	321
Net loss per share applicable to common stockholders basic and diluted	$ (82.68)	$ (83.42)

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

3. Net Loss Per Share (Continued)

The following potentially dilutive securities, prior to the use of the treasury stock method, have been excluded from the computation of diluted weighted-average shares outstanding, as they would be anti-dilutive:

	Year Ended December 31	
	2009	2010
Convertible preferred stock	11,808	11,808
Options to purchase common stock	1,217	1,462
Warrants	1	1

4. Marketable Securities

Available-for-sale marketable securities and cash and cash equivalents consist of the following:

	December 31, 2009			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and cash equivalents:				
Cash	$ 127	$	$	$ 127
Money market	7,269			7,269
Government sponsored enterprises (GSEs)	500			500
Total	$ 7,896	$	$	$ 7,896
Marketable securities:				
GSEs	$ 16,680	$ 13	$	$ 16,693
Corporate debt securities	3,115	1		3,116
Corporate commercial paper	1,748	1		1,749
US Treasury obligations	2,268			2,268
Total	$ 23,811	$ 15	$	$ 23,826

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

4. Marketable Securities (Continued)

	December 31, 2010			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and cash equivalents:				
Cash	$ 232	$	$	$ 232
Money market	6,452			6,452
Corporate commercial paper	2,892			2,892
Corporate debt securities	1,006			1,006
Total	$ 10,582	$	$	$ 10,582
Marketable securities:				
Corporate debt securities	$ 5,024	$	$ (3)	$ 5,021
Corporate commercial paper	2,948			2,948
Total	$ 7,972	$	$ (3)	$ 7,969

There were 6 debt securities that had been in an unrealized loss position for less than 12 months at December 31, 2010. The aggregate unrealized loss on these securities was $4 and the fair value was $6,024. The Company evaluated the securities for other-than-temporary impairments based on quantitative and qualitative factors. The Company considered the decline in market value for these securities to be primarily attributable to current economic conditions. The Company does not intend to sell these securities prior to their maturity and it is not more likely than not that the Company will be required to sell these securities before the recovery of their amortized costs bases, which may be at maturity.

All of the Company's marketable securities have contractual maturities of less than one year. Financial assets carried at fair value as of December 31, 2009 and 2010 are classified in the table below in one of the three categories described in Note 2:

	December 31, 2009			
	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	$ 7,896	$	$	$ 7,896
Marketable securities:				
GSEs		16,693		16,693
Corporate debt securities		3,116		3,116
Corporate commercial paper		1,749		1,749
U.S. Treasury obligations	2,268			2,268
	$ 10,164	$ 21,558	$	$ 31,722

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

4. Marketable Securities (Continued)

	December 31, 2010			
	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	$ 10,582	$	$	$ 10,582
Marketable securities:				
Corporate debt securities		5,020		5,020
Corporate commercial paper		2,949		2,949
	$ 10,582	$ 7,969	$	$ 18,551

Fair value for Level 1 is based on quoted market prices. Fair value for Level 2 is based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets. Inputs are obtained from various sources including market participants, dealers and brokers.

5. Property and Equipment

Property and equipment consists of the following:

	Estimated Useful Life (In Years)	December 31	
		2009	2010
Furniture and fixtures	5	$ 36	$ 36
Computer equipment and software	3	223	238
Leasehold improvements	Shorter of useful life or remaining lease term	367	367
Laboratory equipment	5	628	
		1,254	641
Less accumulated depreciation and amortization		(1,119)	(610)
		$ 135	$ 31

In September 2010, the Company disposed of and subsequently sold laboratory equipment with an original cost of $628 and accumulated depreciation of $579 for proceeds of $149.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

6. Accrued Expenses

Accrued expenses consist of the following:

	December 31,	
	2009	2010
Research costs	$ 822	$ 1,913
Payroll and employee benefits	293	473
Professional fees	83	243
Vacation	79	79
Restructuring		63
Scientific advisory board fees	3	
Total accrued expenses	$ 1,280	$ 2,771

7. Commitments

On August 28, 2007, the Company signed a 24-month sublease agreement for office and laboratory space in Cambridge, Massachusetts. The sublease, which commenced on November 1, 2007 and contains no escalating rental payments, is charged to rent expense ratably over the lease period. On March 13, 2009, the Company signed a 24-month extension on the sublease through October 31, 2011. On January 14, 2011, the Company signed an agreement to terminate this sublease effective February 28, 2011.

As of December 31, 2010, remaining minimum lease payments per the termination agreement are:

2011	$ 63

Rent expense was $629 and $535 for the years ended December 31, 2009 and 2010, respectively.

In September 2010, the Company recorded restructuring charges of $217 related to lease termination costs associated with vacating its laboratory space. The restructuring liability is included in accrued expenses in the balance sheet. All remaining payments were made by February 28, 2011.

The following table displays the restructuring activity and liability balances:

Balance at December 31, 2009	$
Charges	217
Payments	(154)
Balance at December 31, 2010	$ 63

On January 14, 2011, the Company signed a sublease agreement for office space in Cambridge, Massachusetts that expires on July 31, 2011. Monthly rental payments under this sublease are $9 and the Company moved into the new space in February 2011.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

8. Loan and Security Agreement

In connection with a Loan and Security Agreement executed in 2004, the Company issued, in two separate allotments to the lender, warrants for the purchase of an aggregate of 20 shares of Series A Junior Convertible Preferred Stock at $1.00 per share. The warrants were 100% vested as of the grant date and expire in 2014. The Company valued the warrants using the Black-Scholes method and determined the fair value of the warrants to be approximately $40, which was recorded as a debt discount and was amortized to interest expense over the term of the Loan and Security Agreement, being 42 months. The debt discount was fully amortized as of December 31, 2007. The change in fair value of the warrants was not material to the financial statements for the years ended December 31, 2009 and 2010.

9. Convertible Preferred Stock and Redeemable Convertible Preferred Stock

On November 14, 2003, the Company issued 61 shares of Series A Junior Convertible Preferred Stock (Series A Preferred Stock).

On November 14, 2003, the Company issued 533 shares of Series B Redeemable Convertible Preferred Stock (Series B Preferred Stock) in the Stage I closing, on December 31, 2004, the Company issued 533 shares of Series B Preferred Stock, in the Stage II closing, and on December 31, 2005, the Company issued an additional 533 shares of Series B Preferred Stock, in the Stage III closing, under the Series B Convertible Redeemable Preferred Stock Purchase Agreement (the Series B Agreement) at a purchase price of $15.00 per share, resulting in net proceeds of $7,831, $7,967, and $7,977, respectively.

On December 15, 2006, the Company issued 2,193 shares of Series C Redeemable Convertible Preferred Stock, in the Stage I closing under the Series C Convertible Redeemable Preferred Stock Purchase Agreement (the Series C Agreement) at a purchase price of $ 8.14 per share, resulting in net proceeds of $17,633. On February 23, 2007, the Company issued 1,407 shares of Series C Redeemable Convertible Preferred Stock, in an additional Stage I closing, and on August 17, 2007, the Company issued an additional 1,228 shares of Series C Preferred Stock, in an additional interim closing, under the Series C Agreement at a purchase price of $8.14 per share, resulting in net proceeds of $21,397 (net of issuance costs of $57).

The Series C Preferred Stock Stage I investors also agreed, subject to the attainment of certain milestones, to purchase additional shares of Series C Preferred Stock. The price for the subsequent purchases was fixed at $ 8.14. This right to purchase the Series C Preferred Stock (Investor Right/Obligation) represented a free-standing financial instrument, which was recorded at its fair value as a short-term liability at December 31, 2006 and 2007 in accordance with ASC 480-10 (formerly SFAS No. 150*, Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*).

On March 28, 2008, the Company issued 3,472 shares of Series C Preferred Stock, in a Stage II closing, at a purchase price of $8.14 per share, resulting in net proceeds of $28,255 (net of issuance costs of $11). This financing settled the Investor Right/Obligation noted above, and, accordingly, the liability for such was derecognized and recorded as additional paid-in capital. In accordance with ASC 480-10, the Company calculated the fair value of the obligation at the date of the attainment of the milestones to be approximately $7,100, which was recorded as additional paid-in capital upon the subsequent closing.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

9. Convertible Preferred Stock and Redeemable Convertible Preferred Stock (Continued)

On November 14, 2008, the Company issued 1,846 shares of Series C Preferred Stock to existing investors, in a Stage III closing, at a purchase price of $8.14 per share, resulting in net proceeds of $14,810 (net of issuance costs of $219).

The rights, preferences, and privileges of the Series A Preferred Stock, Series B Preferred Stock, and Series C Preferred Stock (collectively, the Preferred Stock) are as follows:

Conversion

Each Preferred stockholder has the right, at their option at any time, to convert any such shares of Preferred Stock into such number of fully paid shares as is determined by dividing the original purchase price by the conversion price. The conversion price of the Preferred Stock as of December 31, 2009 and 2010 was $8.14 and $15.00 per share for Series C Preferred Stock and for Series B and A Preferred Stock, respectively, which in each case represents a 1 for 1 conversion ratio to common stock.

Redemption

At the request of holders of 68% in voting power of the shares of Series B and Series C Preferred Stock then outstanding, made at any time on or after the fourth anniversary of the original Series C Preferred Stock issuance date, the Company will be required to redeem all of the outstanding shares of Series B and Series C Preferred Stock at a redemption price equal to the original Series B or Series C Preferred Stock purchase price of $15.00 and $8.14, respectively, plus any declared or accrued but unpaid dividends. Dividends accrue at 8% per annum, compounding annually, commencing on the date of issuance of the Series B and C Preferred Stock, respectively.

If the Company, at any time, breaches any of its representations, warranties, covenants, and/or agreements set forth in the Stockholders' Agreements between the Company and the Series B and Series C Preferred Stockholders specified in those agreements, holders of 68% of the voting power of the Series B and Series C Preferred Stock may elect, at their sole discretion, if the breach is not cured within 60 days, to accelerate the maturity of the rights of all the Series B and Series C Preferred Stockholders and cause the immediate redemption of all the shares of Series B and Series C Preferred Stock.

The Series A Preferred Stock is not redeemable.

Dividends

Following payment in full of required dividends to the holders of Series C Stock and Series B Stock, Series A Preferred Stockholders are entitled to receive dividends on shares of Series A Preferred Stock, when, if and as declared by the Board of Directors at a rate to be determined by the Board of Directors.

Following payment in full of required dividends to the holders of Series C Stock, Series B Preferred Stockholders are entitled to receive dividends at the rate of 8% per annum, compounding annually, which will accrue on a quarterly basis commencing on the date of issuance of the Series B Preferred Stock. Dividends will be payable, as accrued, upon liquidation, event of sale, redemption date, and conversion to common stock (whether declared or not) as specified in the Stockholders'

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

9. Convertible Preferred Stock and Redeemable Convertible Preferred Stock (Continued)

Agreement. The holders of shares of Series B Preferred Stock are also entitled to dividends declared or paid on any shares of common stock.

Series C Preferred Stockholders are entitled to receive dividends at the rate of 8% per annum, compounding annually, which will accrue on a quarterly basis commencing on the date of issuance of the Series C Preferred Stock. Dividends will be payable, as accrued, upon liquidation, event of sale, redemption date, and conversion to common stock as (whether declared or not) specified in the Stockholders' Agreement. The holders of shares of Series C Preferred Stock are also entitled to dividends declared or paid on any shares of common stock.

Voting

The Preferred Stockholders are entitled to vote together with the holders of the common stock as one class on an as if converted basis.

In addition, the Series B and Series C Preferred Stockholders, voting as a separate class (Senior Preferred Stockholders), have the exclusive right to elect six members of the Board of Directors.

Liquidation

The Series C Preferred Stock ranks senior and prior to the Series B Preferred Stock, Series A Preferred Stock, and the Company's common stock. The Series B Preferred Stock ranks senior and prior to the Series A Preferred Stock and the Company's common stock, and junior to the Series C Preferred Stock. The Series A Preferred Stock ranks senior and prior to the Company's common stock.

In the event of a liquidation, dissolution, or winding-up of the Company, the holders of the Series C Preferred Stock are entitled to be paid first out of the assets available for distribution, before any payment shall be made to the Series B and Series A Preferred Stockholders. Payment to the Series C Preferred Stockholders shall consist of the original issuance price of $8.14, plus all accrued but unpaid dividends and interest. After the distribution to the Series C Preferred Stockholders, the holders of Series B Preferred Stock, and then Series A Preferred Stock, will be entitled to receive an amount per share equal to the original purchase price per share of $15.00, plus any declared and unpaid dividends. If the assets of the Company are insufficient to pay the full preferential amounts to the Series C Preferred Stockholders, the assets will be distributed ratably among the Series C Preferred Stockholders in proportion to their aggregate liquidation preference amounts. If the assets of the Company are insufficient to pay the full preferential amounts to the Series B and Series A Preferred Stockholders, after payment to the Series C Preferred Stockholders, the Series B Stockholders shall first share ratably in any remaining distribution of assets according to the respective amounts which would be repayable to them in respect of the shares of Series B Preferred Stock held upon such distribution. The Series A Preferred Stockholders would only share in the distribution of assets once the Series B Preferred Stockholders have received their full preferential amounts.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

9. Convertible Preferred Stock and Redeemable Convertible Preferred Stock (Continued)

In the event of, and simultaneously with, the closing of an Event of Sale of the Company (as defined in the Stockholders' Agreement), the Company shall redeem all of the shares of Series A, Series B, and Series C Preferred Stock then outstanding at the Special Liquidation Price. If the Event of Sale involves consideration other than cash, the Special Liquidation Price may be paid with such consideration having a value equal to the Special Liquidation Price. The Special Liquidation Price shall be equal to an amount per share, which would be received by each Preferred Stockholder if, in connection with the Event of Sale, all the consideration paid in exchange for the assets or the shares of capital stock of the Company was actually paid to and received by the Company, and the Company was immediately liquidated thereafter and its assets distributed pursuant to the liquidation terms above.

10. Stockholders' Deficit

Common Stock

The Company has reserved the following number of shares of common stock at December 31, 2009 and 2010:

	December 31	
	2009	**2010**
Conversion of Series A Preferred Stock	62	62
Conversion of Series B Preferred Stock	1,600	1,600
Conversion of Series C Preferred Stock	10,147	10,147
Stock options	1,767	1,765
Warrants	1	1
Total	13,577	13,575

2003 Long-Term Incentive Plan

The Company's 2003 Long-Term Incentive Plan (the Plan) provides for the granting of incentive stock options, nonqualified options and stock grants to key employees and consultants of the Company. The exercise price of the incentive stock options, as determined by the Board of Directors, must be at least 100% (110% in the case of incentive stock options granted to a stockholder owning in excess of 10% of the Company's common stock) of the common stock fair value as of the date of the grant. The provisions of the Plan limit the exercise of incentive stock options, but in no case may the exercise period extend beyond ten years from the date of grant (five years in the case of incentive stock options granted to a stockholder owning in excess of 10% of the Company's common stock). Stock options generally vest over a four-year period. The Company has authorized 2,016 shares of common stock for issuance under the Plan.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

10. Stockholders' Deficit (Continued)

Stock-Based Compensation

A summary of stock option activity is as follows:

	Shares	Weighted-Average Exercise Price (in dollars per share)	Weighted-Average Contractual Life (In Years)	Aggregate Intrinsic Value
Options outstanding at December 31, 2009	1,217	$ 1.20	7.74	$ 1,382
Granted	258	1.35		
Exercised	(2)	0.90		
Cancelled	(11)	1.20		
Options outstanding at December 31, 2010	1,462	$ 1.20	7.28	$ 1,715
Options exercisable at December 31, 2010	1,018	$ 1.20	6.69	$ 1,154
Options vested or expected to vest at December 31, 2010	1,449	$ 1.20	7.26	$ 1,699

No stock options were exercised in the year ended December 31, 2009 and 2 stock options were exercised in the year ended December 31, 2010. The weighted-average grant-date fair value of options granted during 2009 and 2010 was $0.75 and $0.60, respectively. The total grant-date fair value of stock options that vested during 2010 was approximately $104. The aggregate intrinsic value of options that vested during 2010 was approximately $154.

As of December 31, 2010, there was approximately $101 of total unrecognized compensation expense related to unvested employee share-based compensation arrangements, which is expected to be recognized over a weighted-average period of approximately 0.6 years.

During 2009 and 2010, the Company's Board of Directors granted 2 and 10 stock options, respectively, to a Scientific Advisory Board member of the Company. During 2010, the Company's Board of Directors granted 257 stock options to a new member of the Board of Directors of the Company. The Company records stock-based compensation expense for such options as they vest, and remeasures the fair value of the options at each reporting period. During the years ended December 31, 2009 and 2010, the Company recorded approximately $25 and $34 of stock-based compensation expense, respectively.

11. License Agreements

On September 27, 2005, the Company entered into a license agreement (the Ipsen Agreement) with SCRAS SAS, a French corporation on behalf of itself and its affiliates (collectively, Ipsen). Under the Ipsen Agreement, Ipsen granted to the Company an exclusive right and license under certain Ipsen compound technology and related patents to research, develop, manufacture and commercialize certain compounds and related products in all countries, except Japan and (subject to certain co-marketing and co-promotion rights retained by Ipsen) France. BA058 (the Company's bone growth drug) is subject to the Ipsen Agreement. Ipsen also granted the Company an exclusive right and license under the Ipsen compound technology and related patents to make and have made compounds or product in Japan.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

11. License Agreements (Continued)

Ipsen also granted the Company an exclusive right and license under certain Ipsen formulation technology and related patents solely for purposes of enabling the Company to develop, manufacture and commercialize compounds and products covered by the compound technology license in all countries, except Japan and (subject to certain co-marketing and pro-promotion rights retained by Ipsen) France. In consideration for these licenses, the Company made a nonrefundable, non-creditable payment of $250 to Ipsen, which was expensed during 2005 as research and development costs. The Ipsen Agreement provides for further payments to Ipsen upon the achievement of certain development and commercialization milestones specified in the Ipsen Agreement, and for the payment of royalties on net sales of any product that includes the compound licensed from Ipsen or any analog thereof.

If the Company sublicenses the rights licensed from Ipsen, then the Company will also be required to pay Ipsen a percentage of certain payments received from such sublicensee (in lieu of milestone payments not achieved at the time of such sublicense). The Ipsen Agreement was amended on September 12, 2007. In connection with the Ipsen Agreement, the Company recorded approximately $1,117 and $1,227 in research and developments costs in the years ended December 31, 2009 and 2010, respectively. The costs were incurred by Ipsen and charged to the Company for the manufacture of the clinical supply of the licensed compound.

On May 11, 2011, the Company entered into a second amendment to the Ipsen Agreement pursuant to which Ipsen agreed to accept shares of Radius Series A-1 convertible preferred stock (Series A-1 Preferred Stock) in lieu of cash as consideration for a milestone payment due to Ipsen following the initiation of the first BA058 Phase III study. The number of shares of Series A-1 Preferred Stock to be issued to Ipsen will be determined based upon the exchange rate for the euro two business days prior to closing, which is expected to occur on May 17, 2011. Assuming the exchange rate effective on May 17, 2011, the Company would issue 17 shares of Series A-1 Preferred Stock to Ipsen to settle the obligation. The number of shares could increase or decrease due to changes in the exchange rate upon closing. Radius agreed to pay interest in cash to Ipsen should the closing not occur within the defined timeframe for payment of the milestone.

On June 29, 2006, the Company entered into a license agreement (the Eisai Agreement) with Eisai Co., Ltd. (Eisai) under which the Company was granted the exclusive license in all countries, except Japan, to use certain technology related to the compound known as RAD1901 (the Company's drug for the treatment of menopausal symptoms, as well as other women's health issues). The Company also was granted the right to sublicense with prior written approval from Eisai, but subject to a right of first negotiation held by Eisai if the Company seeks to grant sublicenses limited to particular Asian countries. In consideration for the license, the Company made an initial payment to Eisai of $500 upon signing of the Eisai Agreement, which was expensed as research and development costs at that time. The Eisai Agreement also provides for further payments to Eisai upon the achievement of certain development and regulatory milestones, as defined in the Eisai Agreement. Additionally, the Eisai Agreement provides for the payment of royalties on net sales of products covered by the licensed patents and technology. In January 2008, the Company paid $500 to Eisai upon the achievement of the first. milestone, acceptance of the Company's Investigational New Drug submission. The payment was expensed as research and development costs. No payments were made to Eisai in 2009, and $500 was expensed as research and development expense and paid to Eisai in March 2010 upon achievement of the second milestone.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

11. License Agreements (Continued)

On August 17, 2007, the Company entered into an option agreement with Novartis International Pharmaceutical Ltd (Novartis). For a fee of $5,000, paid to the Company in August 2007, Novartis had the option of obtaining an exclusive sublicense to further develop and commercialize products comprising Radius' proprietary PTH related protein analog, BA058, and any back-up or derivative compounds, subject to the terms of the sublicense agreement for a fixed period of time as defined in the Option Agreement. The Option Agreement terminated at the earlier of the execution of a sublicense agreement between the two parties, or six months from the date Novartis received a Study Report, as defined in the Option Agreement, from the Company. The Company delivered the Study Report to Novartis in April 2009. In October of 2009, Novartis notified the Company that it would not be exercising its option to license the technology per the terms of the agreement. The Company recognized the $5,000 option fee as revenue ratably based on the estimated performance period.

12. Research Agreements

In March 2004, the Company entered into a Laboratory Services and Confidentiality Agreement with Charles River Laboratories, Inc. ("CRLI") and amended this agreement on November 7, 2008. The Company has entered into a series of letter agreements with CRLI pursuant to this Laboratory Services and Confidentiality Agreement, covering the performance of certain testing and analytical services concerning the Company's product candidates. For the years ended December 31, 2009 and 2010, the Company incurred approximately $204 and $528 of costs, which were expensed as research and development costs, respectively.

On November 3, 2006, the Company entered into a master clinical services agreement with MDS Pharma Services, Inc. (MDS) whereby the Company agreed to sponsor a study conducted by MDS to evaluate the effects of the Company's bone growth drug (BA058) in the treatment of postmenopausal women with osteoporosis. The expected duration of the study was from September 2006 through March 2009. During 2009 the agreement was assigned by MDS to INC Research, Inc. Total estimated costs to be incurred under this agreement are $9,500. For the years ended December 31, 2009 and 2010, the Company incurred approximately $1,700 and $12 of costs, which were expensed as research and development costs, respectively.

In October 2007, the Company entered into a Development and Manufacturing Services Agreement with LONZA Sales Ltd. on behalf of itself and its affiliates (collectively, Lonza). The Company and Lonza have entered into a series of Work Orders pursuant to the Development and Manufacturing Services Agreement pursuant to which Lonza has performed pharmaceutical development and manufacturing services for the Company's BA058 product. For the years ended December 31, 2009 and 2010, the Company incurred approximately $26 and $974 of costs, which were expensed as research and development costs, respectively.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

12. Research Agreements (Continued)

On December 4, 2008, the Company entered into a Feasibility Agreement with 3M Company and 3M Innovative Properties Company (collectively 3M) whereby 3M assessed the feasibility of developing a BA058 microneedle patch product and supplying the product for preclinical studies in an animal model. On June 19, 2009, upon completion of the feasibility study, the Company entered into a Development and Clinical Supplies Agreement with 3M for the further development of a BA058 microneedle patch product and the supply of such product for certain clinical studies. Total payments to 3M for work performed under both the Feasibility Agreement and the Development and Clinical Supplies Agreement were approximately $2,400 and $313 in the years ended December 31, 2009 and 2010, respectively. These costs were expensed as incurred to research and development.

In September 2010, the Company entered into a Letter of Intent with Nordic Bioscience Clinical Development VII A/S ("Nordic") on, pursuant to which the Company funded preparatory work by Nordic in respect of a Phase III clinical study of BA058 for injection. The Letter of Intent was extended on December 15, 2010 and on January 31, 2011. Pursuant to the Letter of Intent and the two extensions, Radius funded an aggregate $1,500 of preparatory work by Nordic during 2010 and funded and additional $750 of preparatory work by Nordic during 2011. On March 29, 2011, the Company and Nordic entered into a Clinical Trial Services Agreement, a Work Statement NB-1 under such Clinical Trial Services Agreement and a related Stock Issuance Agreement. Pursuant to Work Statement NB-1, Nordic is managing the Phase III clinical study of BA058 for Injection. Pursuant to the Stock Issuance Agreement, Nordic will purchase the equivalent of €372 of Radius' Series A-5 Preferred Stock at a price per share equal to $8.142. The Stock Issuance Agreement provides that Nordic will receive additional shares of capital stock, which shall initially be in the form of the Company's Series A-6 Preferred Stock, at certain times during the performance of the Phase III clinical study that is the subject of Work Statement NB-1.

13. Income Taxes

As of December 31, 2010 the Company had federal and state net operating loss (NOL) carryforwards of approximately $85,483 and $74,621, respectively, which may be used to offset future taxable income. The Company also had federal and state tax credits of $2,424 and $257, respectively, to offset future tax liabilities. The NOL and tax credit carryforwards will expire at various dates through 2030, and are subject to review and possible adjustment by federal and state tax authorities. The Internal Revenue Code contains provision that may limit the NOL and tax credit carryforwards available to be used in any given year in the event of certain changes in the ownership interests of significant stockholders under Section 382 of the Internal Revenue Code.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

13. Income Taxes (Continued)

A reconciliation of income taxes computed using the U.S. federal statutory rate to that reflected in operations follows:

	Year Ended December 31	
	2009	2010
Income tax benefit using U.S. federal statutory rate	$ (5,130)	$ (4,974)
State income taxes, net of federal benefit	(946)	411
Stock-based compensation	40	34
Research and development tax credits	(504)	(320)
Change in the valuation allowance	6,405	4,838
Permanent items	124	3
Other	11	8
	$	$

The Company is subject to Massachusetts net worth taxes, not based on income, which is largely offset by allowable tax credits and recorded as a component of operating expenses.

The principal components of the Company's deferred tax assets are as follows:

	December 31	
	2009	2010
Deferred tax assets:		
Net operating loss carryforwards	$ 28,047	$ 33,008
Capitalized research and development	2,244	1,789
Research and development credits	2,273	2,593
Depreciation and amortization	122	126
Other	141	148
Gross deferred tax assets	32,827	37,664
Valuation allowance	(32,827)	(37,664)
Net deferred tax asset	$	$

The Company has recorded a valuation allowance against its deferred tax assets in each of the years ended December 31, 2009 and 2010, because the Company's management believes that it is more likely than not that these assets will not be realized. The increase in the valuation allowance in 2010 primarily relates to the net loss incurred by the Company.

Effective January 1, 2009, the Company adopted new accounting guidance related to accounting for uncertainty in income taxes. The Company's reserves related to taxes are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more likely than not to be realized following resolution of any potential contingencies present related to the tax benefit. As a result of the implementation of the new guidance, the Company recognized no material adjustment for unrecognized income tax benefits. As of the adoption date on January 1, 2009, and through December 31, 2010, the Company had no unrecognized tax benefits or related interest and

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

13. Income Taxes (Continued)

penalties accrued. The Company has not, as yet, conducted a study of research and development (R&D) credit carryforwards. This study may result in an adjustment to the Company's R&D credit carryforwards; however, until a study is completed and any adjustment is known, no amounts are being presented as an uncertain tax position. A full valuation allowance has been provided against the Company's R&D credits and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no impact to the balance sheet or statement of operations if an adjustment were required. The Company would recognize both accrued interest and penalties related to unrecognized benefits in income tax expense. The Company has not recorded any interest or penalties on any unrecognized benefits since inception.

The statute of limitations for assessment by the Internal Revenue Service and Massachusetts tax authorities is closed for tax years prior to December 31, 2007, although carryforward attributes that were generated prior to tax year 2007 may still be adjusted upon examination by the IRS or state tax authorities if they either have been or will be used in a future period. The Company files income tax returns in the United States and Massachusetts. There are currently no federal or state audits in progress.

Qualifying Therapeutic Discovery Project Grants

In October 2010, the Company received notification from the Internal Revenue Service that it was awarded three separate grants in the aggregate amount of $733 pursuant to the qualifying therapeutic discovery grant program established by the Internal Revenue Service and the Secretary of Health and Human Services under the Patient Protection and Affordable Care Act of 2010. The grants were made with respect to certain of the Company's qualifying research and development programs. The Company received the full amount related to these grants in 2010, and this amount was recorded as other income in the statement of operations for the year ended December 31, 2010.

14. Subsequent Events

On April 25, 2011, the Company executed a merger agreement for a reverse merger with MPM Acquisition Corp., a public shell company, and a Series A-1 convertible preferred stock purchase agreement ("Stock Purchase Agreement"). On May 11, 2011, the Stock Purchase Agreement was amended to provide the Company with an irrevocable, legally binding commitment for $64,300 of proceeds from the issuance of 789 shares of Series A-1 convertible preferred stock at $81.42 per share to accredited investors in three closings which will take place in 2011. The proceeds from each closing are generally due to the Company upon written request according to the provisions of the Stock Purchase Agreement, as amended, and there are no closing conditions or other contingencies that would prevent the Company from having access to the proceeds at their request. Prior to the execution of the reverse merger, the Company's existing preferred stock will be recapitalized whereby shares of the existing Series C, Series B and Series A Preferred Stock will be exchanged for new Series A-2 convertible preferred stock, new Series A-3 convertible preferred stock and new Series A-4 convertible preferred stock, respectively. All prior accrued dividends on the original Series B and C Preferred stock will be forfeited by the holders as part of this recapitalization. In addition, the holders of the Series B and Series C Preferred stock waived their contingent redemption rights on such shares.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

(in thousands except per share amounts)

14. Subsequent Events (Continued)

On May 17, 2011, the Company's Board of Directors and stockholders approved a 15:1 reverse stock split of all of the Company's capital stock. All share and per share amounts in the financial statements have been retroactively adjusted for all periods presented to give effect to the reverse stock split, including reclassifying an amount equal to the reduction in par value to additional paid-in-capital.

On May 17, 2011, the Company's preferred stock was recapitalized, as discussed above, and the Company closed the reverse merger with MPM Acquisition Corp. The financial statements have been retroactively adjusted to give effect to the reverse Merger, including the change in par value from $0.01 to $0.0001 and the exchange of one share of each series of new preferred stock for one-tenth of one share of new preferred stock that was effective upon Merger closing. In addition, the Company executed the first closing under the Stock Purchase Agreement pursuant to which it issued 263 shares of Series A-1 convertible preferred stock for gross proceeds of $21,400. The Company also issued 6 shares of Series A-5 convertible preferred stock to Nordic for proceeds of $525 in accordance with the Stock Issuance Agreement discussed in Note 12.

15. Subsequent Event (unaudited)

On May 23, 2011, the Company entered into a Loan and Security Agreement (the Agreement) with several lenders, pursuant to which the lenders agreed to make available to the Company $25,000 in the aggregate over three term loans. The initial term loan was made on May 23, 2011 in an aggregate principal amount equal to $6,250 (the "Initial Term Loan") and is repayable over a term of 42 months, including a six-month interest only period . The Initial Term Loan bears interest at 10%. Pursuant to the Agreement, the Company may request two additional term loans, the first, which must be funded no later than November 23, 2011, in an aggregate principal amount equal to $6,250 (the "Second Term Loan") and the second, which must be funded not later than May 23, 2012, in an aggregate principal amount equal to $12,500 (the "Third Term Loan"). In the event the Second Term Loan is not funded on or before November 23, 2011, the Lenders' commitment to make the Second Term Loan shall be terminated and the total commitment shall be reduced by $6,250. In the event the Third Term Loan is not funded on or before May 23, 2012, the Lenders' commitment to make the Third Term Loan shall be terminated and the total commitment shall be further reduced by $12,500. Pursuant to the Agreement, the Company agreed to issue to the Lenders (or their respective affiliates or designees) warrants to purchase a number of shares of the Company's Series A-1 Preferred Stock equal to the quotient of (a) the product of (i) the amount of the applicable term loan multiplied by (ii) four percent (4%) divided by (b) the exercise price equal to $81.42 per share. The warrants expire ten years from the date they are issued. On May 23, 2011, the Company issued a warrant to each of the lenders for the purchase of a total of 3 shares of Series A-1 Preferred stock.

Table of Contents

Radius Health, Inc.
Condensed Balance Sheets
(Unaudited, in thousands, except share and per share amounts)

	June 30, 2011	December 31, 2010
Assets		
Current assets:		
Cash and cash equivalents	$ 25,336	$ 10,582
Marketable securities		7,969
Prepaid expenses and other current assets	3,367	282
Total current assets	28,703	18,833
Property and equipment, net	19	31
Other assets	71	105
Total assets	$ 28,793	$ 18,969
Liabilities, convertible preferred stock, redeemable convertible preferred stock and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 72	$ 614
Accrued expenses	4,278	2,771
Current portion of note payable	851	
Total current liabilities	5,201	3,385
Note payable, net of current portion and discount	4,877	
Warrant liability	217	
Other liabilities	3,421	
Commitments and contingencies (*Note 9*)		
Series A-1 Convertible Preferred Stock, $.0001 par value; 1,000,000 shares authorized, 413,254 shares issued and outstanding at June 30, 2011 and no shares issued and outstanding at December 31, 2010	22,437	
Series A-2 Convertible Preferred Stock, $.0001 par value; 983,213 shares authorized, 983,208 shares issued and outstanding at June 30, 2011 and no shares issued and outstanding at December 31, 2010	76,751	
Series A-3 Convertible Preferred Stock, $.0001 par value; 142,230 shares authorized, 142,227 shares issued and outstanding at June 30, 2011 and no shares issued and outstanding at December 31, 2010	9,741	
Series A-4 Convertible Preferred Stock, $.0001 par value; 4,000 shares authorized, 3,998 shares issued and outstanding at June 30, 2011 and no shares issued and outstanding at December 31, 2010	271	
Series A-5 Convertible Preferred Stock, $.0001 par value; 7,000 shares authorized, 6,443 shares issued and outstanding at June 30, 2011 and no shares issued and outstanding at December 31, 2010	525	
Series A-6 Convertible Preferred Stock, $.0001 par value; 800,000 shares authorized, no shares issued and outstanding at June 30, 2011 and no shares issued and outstanding at December 31, 2010		
Series A Junior Convertible Preferred Stock, $.0001 par value; 63,000 shares authorized, 61,664 shares issued and outstanding (liquidation value $925,000) at December 31, 2010 and no shares issued and outstanding at June 30, 2011		93
Series B Redeemable Convertible Preferred Stock, $.0001 par value; 1,600,000 shares authorized, 1,599,997 shares issued and outstanding at liquidation value at December 31, 2010 and no shares issued and outstanding at June 30, 2011		38,309
Series C Redeemable Convertible Preferred Stock, $.0001 par value; 10,146,629 shares authorized, issued and outstanding at liquidation value at December 31, 2010 and no shares issued and outstanding at June 30, 2011		105,434
Stockholders' deficit:		
Common stock, $.0001 par value; 34,859,964 shares authorized, 591,644 and 322,807 shares issued and outstanding at June 30, 2011 and December 31, 2010, respectively		
Additional paid-in-capital	7,833	3
Accumulated other comprehensive loss		(3)
Accumulated deficit	(102,481)	(128,252)
Total stockholders' deficit	$ (94,648)	$ (128,252)
Total liabilities, convertible preferred stock, redeemable convertible preferred stock and stockholders' deficit	$ 28,793	$ 18,969

See accompanying notes.

Table of Contents

Radius Health, Inc.

Condensed Statements of Operations

(Unaudited, in thousands, except share and per share amounts)

	Three-Month Period Ended June 30,		Six-Month Period Ended June 30,	
	2011	2010	2011	2010
Operating expenses:				
Research and development	$ 16,553	$ 2,216	$ 20,689	$ 4,706
General and administrative	945	473	1,842	1,117
Loss from operations	(17,498)	(2,689)	(22,531)	(5,823)
Interest income	6	21	20	47
Other income (expense)	12	(15)	22	(15)
Interest expense	(108)		(108)	
Net loss	$ (17,588)	$ (2,683)	$ (22,597)	$ (5,791)
Earnings (loss) attributable to common stockholders basic and diluted (Note 5)	$ 1,401	$ (5,399)	$ 1,013	$ (11,170)
Earnings (loss) per share (Note 5):				
Basic	$ 2.89	$ (16.85)	$ 2.51	$ (34.86)
Diluted	$ 0.44	$ (16.85)	$ 0.27	$ (34.86)
Weighted average shares:				
Basic	484,237	320,424	403,967	320,424
Diluted	3,175,348	320,424	3,790,913	320,424

See accompanying notes.

Table of Contents

Radius Health, Inc.

Statement of Convertible Preferred Stock and Stockholders' Deficit

(Unaudited, in thousands, except share amounts)

	Convertible Preferred Stock											
	Series A-1		Series A-2		Series A-3		Series A-4		Series A-5		Series A-6	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Balance at December 31, 2010		$		$		$		$		$		$
Net loss												
Unrealized gain from available-for-sale securities												
Total comprehensive loss												
Forced conversion of preferred stock to common stock												
Recapitalization(1)			983,208	75,979	142,227	9,629	3,998	271				
Issuance of preferred stock, net of issuance costs	395,928	20,702							6,443	525		
Accretion of dividends on preferred stock		325		772		112						
Stock-based compensation expense												
Stock options exercised												
Milestone payment settled in preferred stock	17,326	1,410										
Balance at June 30, 2011	413,254	$ 22,437	983,208	$ 76,751	142,227	$ 9,741	3,998	$ 271	6,443	$ 525		$

(1) The recapitalization includes the exchange of Series A, Series B and Series C shares for Series A-4, Series A-3, and Series A-2 shares, respectively, in addition to the 10:1 exchange of Series A-2, Series A-3, and Series A-4 preferred stock, which occurred in conjunction with the Merger, and is more fully described in Note 2.

See accompanying notes

Table of Contents

Radius Health, Inc.

Statement of Convertible Preferred Stock and Stockholders' Deficit (Continued)

(Unaudited, in thousands, except share amounts)

	Convertible Preferred Stock											
	Series A		Series B		Series C		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance at December 31, 2010	61,664	$ 93	1,599,997	$ 38,309	10,146,629	$ 105,434	322,807	$	$ 3	$ (3)	$ (128,252)	$ (128,252)
Net loss											(22,597)	(22,597)
Unrealized gain from available-for-sale securities										3		3
Total comprehensive loss												(22,594)
Forced conversion of preferred stock to common stock	(21,661)	(33)	(177,697)	(296)	(314,496)	(225)	102,767		554			554
Recapitalization(1)	(40,003)	(60)	(1,422,300)	(39,183)	(9,832,133)	(108,425)			8,269		52,712	60,981
Issuance of preferred stock, net of issuance costs												
Accretion of dividends on preferred stock				1,170		3,216			(1,251)		(4,344)	(5,595)
Stock-based compensation expense									106			106
Stock options exercised							166,070		152			152
Milestone payment settled in preferred stock												
Balance at June 30, 2011		$		$		$	591,644	$	$ 7,833	$	$ (102,481)	$ (94,648)

(1) The recapitalization includes the exchange of Series A, Series B and Series C shares for Series A-4, Series A-3, and Series A-2 shares, respectively, in addition to the 10:1 exchange of Series A-2, Series A-3, and Series A-4 preferred stock, which occurred in conjunction with the Merger, and is more fully described in Note 2.

See accompanying notes

Table of Contents

Radius Health, Inc.

Statements of Cash Flows

(Unaudited, in thousands)

	Six-Month Period Ended June 30,	
	2011	**2010**
Operating activities		
Net loss	$ (22,597)	$ (5,791)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	15	40
Stock-based compensation expense	106	9
Research and development expense to be settled in stock	3,421	
Amortization of premium (accretion of discount) on short-term investments, net	21	199
Non-cash interest	30	
Milestone payment settled with stock	1,410	
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(3,028)	58
Other long-term assets	31	
Accounts payable	(541)	(685)
Accrued expenses	1,507	(657)
Net cash used in operating activities	(19,625)	(6,827)
Investing activities		
Purchases of property and equipment	(3)	(15)
Purchases of marketable securities	(899)	(14,798)
Maturities of marketable securities	8,850	26,155
Net cash provided by investing activities	7,948	11,342
Financing activities		
Proceeds from the exercise of stock options	152	
Net proceeds from the issuance of preferred stock	20,452	
Proceeds on note payable, net	5,883	
Deferred financing costs	(56)	
Net cash provided by financing activities	26,431	
Net increase in cash and cash equivalents	14,754	4,515
Cash and cash equivalents at beginning of period	10,582	7,896
Cash and cash equivalents at end of period	$ 25,336	$ 12,411
Noncash financing activities		
Accretion of preferred stock issuance costs	$	$ 45
Fair value of preferred stock issued in the recapitalization, net of issuance costs	$ 85,879	$
Accretion of dividends on preferred stock	$ 5,595	$ 5,379
Accretion of preferred stock investor rights/obligations	$	$ 343

Fair value of warrants issued	$	217	$	

See accompanying notes.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements

1. Organization

Radius Health, Inc. ("Radius" or the "Company"), which was formerly known as MPM Acquisition Corp. is a pharmaceutical company focused on acquiring and developing new therapeutics for the treatment of osteoporosis and other women's health conditions. The Company's lead product candidate, currently in Phase 3 clinical development is BA058 Injection, a daily subcutaneous injection of our novel synthetic peptide analog of human parathyroid hormone-related protein (hPTHrP) for the treatment of osteoporosis. The BA058 Injection Phase 3 study began dosing in April 2011. The Company is also developing the BA058 Microneedle Patch, a short wear time, transdermal form of BA058 delivered using a microneedle technology from 3M Drug Delivery Systems (3M), currently in Phase 1 clinical development. The Company also has two other product candidates, RAD1901, a selective estrogen receptor modulator, or SERM, in Phase 2 clinical development for the treatment of vasomotor symptoms (hot flashes) in women entering menopause and RAD140, a selective androgen receptor modular, or SARM, currently in pre-investigational new drug, or IND, discovery as a potential treatment for age-related muscle loss, frailty, weight loss associated with cancer cachexia and osteoporosis. As used throughout these unaudited, condensed financial statements, the terms "Radius", "Company", "we", "us" and "our" refer to Radius Health, Inc. (f/k/a MPM Acquisition Corp.).

Pursuant to an Agreement and Plan of Merger (the "Merger Agreement" or the "Merger") entered into in April 2011 by and among the Company (a publicly-reporting, Form 10 shell company at the time), RHI Merger Corp., a Delaware corporation and wholly owned subsidiary of the Company ("MergerCo"), and Radius Health, Inc., a privately-held Delaware corporation ("Former Operating Company"), MergerCo merged with and into the Former Operating Company, with the Former Operating Company remaining as the surviving entity and a wholly-owned subsidiary of the Company. This transaction is herein referred to as the "Merger". The Merger was effective as of May 17, 2011, upon the filing of a certificate of merger with the Delaware Secretary of State. Following the Merger on May 17, 2011, the Company's Board of Directors approved a transaction pursuant to which the Former Operating Company merged with and into the Company, leaving the Company as the surviving corporation (the "Short-Form Merger"). As part of the Short-Form Merger, the Company, then named MPM Acquisition Corp., changed its name to Radius Health, Inc. and assumed the operations of the Former Operating Company.

The Company is subject to the risks associated with emerging, technology-oriented companies with a limited operating history, including dependence on key individuals, a developing business model, market acceptance of the Company's product candidates, competitive product candidates, and the continued ability to obtain adequate financing to fund the Company's future operations. The Company has an accumulated deficit of $102.5 million through June 30, 2011. The Company has incurred losses and expects to continue to incur additional losses for the foreseeable future. The Company intends to obtain additional equity and/or debt financing in order to meet working capital requirements and to further develop its product candidates. As part of the Merger and Short-Form Merger in May 2011, the Company assumed the Former Operating Company's agreement with existing and new investors pursuant to which the Former Operating Company received an irrevocable, legally binding commitment for proceeds of $64.3 million from the issuance of shares of Series A-1 Convertible Preferred Stock in three closings. The proceeds from each closing are generally due to the Company upon its written request. The first of the three closings was completed prior to the Merger on May 17, 2011 for gross proceeds of $21.4 million and the Company expects to complete the second and third closings during the remainder of 2011. The Company believes that its existing cash and cash equivalents and the proceeds available from the irrevocable legally binding commitment described above and in Note 4, are

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

1. Organization (Continued)

sufficient to finance its operations, including its obligations under the Nordic agreement described in Note 14, into the second quarter of 2012.

2. Basis of Presentation

The accompanying unaudited condensed financial statements and the related disclosures of the Company have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial reporting and as required by Regulation S-X, Rule 10-01. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments (including those which are normal and recurring) considered necessary for a fair presentation of the interim financial information have been included. When preparing financial statements in conformity with GAAP, the Company must make estimates and assumptions that affect the reported amounts of assets, liabilities, expenses and related disclosures at the date of the financial statements. Actual results could differ from those estimates. Additionally, operating results for the three and six months ended June 30, 2011 are not necessarily indicative of the results that may be expected for any other interim period or for the fiscal year ending December 31, 2011. For further information, refer to the financial statements and footnotes included in the Company's audited financial statements for the year ended December 31, 2010 included on Form 8-K as filed with the Securities and Exchange Commission ("SEC") on May 23, 2011, as amended on July 20, 2011. The accompanying unaudited condensed financial statements and the related disclosures take into account the Merger and Short-Form Merger transactions. In addition, all historical share and per share amounts in the financial statements relating to the Former Operating Company have been retroactively adjusted for all periods presented to give effect to the 15:1 reverse stock split of all of the Former Operating Company's capital stock (the "Reverse Stock Split"), including reclassifying an amount equal to the reduction in par value to additional paid-in-capital, approved by the Former Operating Company's Board of Directors prior to the Merger on May 17, 2011.

Merger

As described above, the Company completed a reverse merger transaction with the Former Operating Company on May 17, 2011, pursuant to which the Company changed its name from MPM Acquisition Corp. to Radius Health, Inc. and assumed the operations of the Former Operating Company.

As of the effective time of the Merger (the "Effective Time"), the legal existence of MergerCo ceased and all of the shares of the Former Operating Company's common stock, par value $0.01 per share, and shares of the Former Operating Company's preferred stock, par value $0.01 per share, that were outstanding immediately prior to the Merger were cancelled and converted into the right to receive shares of the Company's common or preferred stock, as applicable. Each outstanding share of the Former Operating Company common stock outstanding immediately prior to the Effective Time was automatically converted into the right to receive one share of the Company's common stock, $0.0001 par value per share (the "Common Stock") and each outstanding share of the Company's preferred stock outstanding immediately prior to the Effective Time was automatically converted into the right to receive one-tenth of one share of the Company's preferred stock, $0.0001 par value per share (the "Preferred Stock") as consideration for the Merger. The December 31, 2010 financial

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

2. Basis of Presentation (Continued)

statements, specifically common stock and additional paid-in-capital, have been adjusted to reflect the change in common stock par value.

The Company assumed all options and warrants of the Former Operating Company outstanding immediately prior to the Effective Time, which became exercisable for shares of the Company's Common Stock or Preferred Stock, as the case may be.

Contemporaneously with the closing of the Merger, pursuant to the terms of a Redemption Agreement dated April 25, 2011 by and among the Company and its then-current stockholder, the Company completed the repurchase of 5,000,000 shares of Common Stock from its former sole stockholder in consideration of an aggregate of $50,000. The 5,000,000 shares constituted all of the then issued and outstanding shares of the Company's capital stock, on a fully-diluted basis, immediately prior to the Merger.

Upon completion of the Merger and the Redemption, the former stockholders of the Former Operating Company held 100% of the outstanding shares of capital stock of the Company.

Pursuant to the Merger, the Company assumed all of the Former Operating Company's obligations under its existing contracts. In particular, the Company has assumed the rights and obligations of the Former Operating Company under that certain Series A-1 Convertible Preferred Stock Purchase Agreement, dated as of April 25, 2011, as amended, (the "Purchase Agreement") with that certain investors listed therein (the "Investors") pursuant to which, among other things, the Company is obligated to issue and sell to the Investors up to an aggregate of 789,553 shares of Series A-1 Convertible Preferred Stock, par value $.01 per share (the "Series A-1"), each at a purchase price per share of $81.42, to be completed in three closings for cash proceeds of $64.3 million. The transactions covered by the Purchase Agreement are referred to herein as the "Series A-1 Financing". An initial closing was completed on May 17, 2011 by the Former Operating Company prior to the Merger. Upon notice from the Company, the Investors are obligated to purchase, and the Company is obligated to issue, an additional 263,178 shares of Series A-1 at the Stage II Closing in exchange for cash proceeds of $21.4 million and an additional 263,180 shares of Series A-1 at the Stage III Closing in exchange for cash proceeds of $21.4 million. There are no conditions to funding if the Company notifies the Investors of any such closing.

3. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires the Company's management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Fair Value Measurements

The fair value hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets (Level 1), and the lowest priority to unobservable inputs (Level 3). The Company's financial assets are classified within the fair value hierarchy based on the lowest level of input that is

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

3. Summary of Significant Accounting Policies (Continued)

significant to the fair value measurement. The three levels of the fair value hierarchy, and its applicability to the Company's financial assets, are described below:

Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date of identical, unrestricted assets.

Level 2 Quoted prices for similar assets, or inputs that are observable, either directly or indirectly, for substantially the full term through corroboration with observable market data. Level 2 includes investments valued at quoted prices adjusted for legal or contractual restrictions specific to the security.

Level 3 Pricing inputs are unobservable for the asset, that is, inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset. Level 3 includes private investments that are supported by little or no market activity.

All of the Company's financial assets, comprising cash equivalents and marketable securities, are classified as Level 1 and Level 2 assets as of June 30, 2011 and December 31, 2010 (Note 6). Money market funds are valued using quoted market prices with no valuation adjustments applied. Accordingly, these securities are categorized as Level 1. Assets utilizing Level 2 inputs include government agency securities, including direct issuance bonds, and corporate bonds. These assets are valued using third party pricing resources which generally use interest rates and yield curves observable at commonly quoted intervals of similar assets as observable inputs for pricing.

Redeemable Convertible Preferred Stock

Prior to the Series A-1 Financing on May 17, 2011, the carrying value of the Company's redeemable convertible preferred stock was adjusted by periodic accretions such that the carrying value will equal the redemption amount at the redemption date. The carrying value is also adjusted to reflect dividends that accrue quarterly on the redeemable convertible preferred stock (Note 11). In connection with the recapitalization discussed in Note 4, the Company's Preferred Stock is no longer redeemable, other than upon a deemed liquidation event, as defined.

Preferred Stock Accounting

The Company accounts for an amendment that adds, deletes or significantly changes a substantive contractual term (e.g., one that is at least reasonably possible of being exercised), or fundamentally changes the nature of the preferred shares as an extinguishment. (Note 4)

Financial Instruments Indexed to and Potentially Settled in the Company's Common stock

The Company evaluates all financial instruments issued in connection with its equity offerings when determining the proper accounting treatment for such instruments in the Company's financial statements. The Company considers a number of generally accepted accounting principles to determine such treatment and evaluates the features of the instrument to determine the appropriate accounting treatment. The Company utilizes the Black-Scholes method or other appropriate methods to determine the fair value of its derivative financial instruments. Key valuation factors in determining the fair value include, but are not limited to, the current stock price as of the date of measurement, the exercise price, the remaining contractual life, expected volatility for the instrument and the risk-free interest rate. For financial instruments that are determined to be classified as liabilities on the balance sheet,

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

3. Summary of Significant Accounting Policies (Continued)

changes in fair value are recorded as a gain or loss in the Company's Statement of Operations with the corresponding amount recorded as an adjustment to the liability on its Balance Sheet.

Research and Development

The Company accounts for research and development costs by expensing such costs to operations as incurred. Research and development costs primarily consist of personnel costs, outsourced research activities including pre-clinical and clinical trial services and manufacturing services, laboratory supplies, and license fees.

Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are deferred and capitalized. The capitalized amounts will be expensed as the related goods are delivered or the services are performed. If expectations change such that the Company does not expect it will need the goods to be delivered or the services to be rendered, capitalized nonrefundable advance payments would be charged to expense.

Stock-Based Compensation

The Company recognizes, as expense, the grant date fair value of all share-based payments to employees. The Company accounts for transactions in which services are received from non-employees in exchange for equity instruments based on the estimated fair value of such services received or of the equity instruments issued, whichever is more reliably measured. The fair value of unvested non-employee awards are remeasured at each reporting period and expensed over the vesting term of the underlying stock options.

Segment Information

The Company makes operating decisions based on performance of the enterprise as a whole and uses the financial statements for decision making. The Company operates in one business segment, which focuses on drug discovery and development.

Net Income (Loss) Per Common Share

Net income (loss) per common share is calculated using the two-class method, which is an earnings allocation formula that determines net income (loss) per share for the holders of the Company's common shares and participating securities. All series of Preferred Stock, excluding the Former Operating Company's Series A Convertible Preferred Stock, contain participation rights in any dividend paid by the Company and are deemed to be participating securities. Net income available to common shareholders and participating convertible preferred shares is allocated to each share on an as-converted basis as if all of the earnings for the period had been distributed. The participating securities do not include a contractual obligation to share in losses of the Company and are not included in the calculation of net loss per share in the periods that have a net loss.

Diluted net income per share is computed using the more dilutive of (a) the two-class method, or (b) the if-converted method. The Company allocates net income first to preferred stockholders based on dividend rights and then to common and preferred stockholders based on ownership interests. The weighted-average number of common shares outstanding gives effect to all potentially dilutive common equivalent shares, including outstanding stock options, warrants, and potential issuance of stock upon

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

3. Summary of Significant Accounting Policies (Continued)

the issuance of Series A-6 Convertible Preferred Stock ("Series A-6") as settlement of the liability to Nordic Bioscience ("Nordic"). Common equivalent shares are excluded from the computation of diluted net income (loss) per share if their effect is anti-dilutive.

Income Taxes

The Company accounts for income taxes under the liability method. Deferred tax assets and liabilities are determined based on differences between financial reporting and income tax basis of assets and liabilities, as well as net operating loss carryforwards, and are measured using the enacted tax laws that will be in effect when the differences reverse. Deferred tax assets are reduced by a valuation allowance to reflect the uncertainty associated with their ultimate realization. The effect on deferred taxes of a change in tax rate is recognized in income or loss in the period that includes the enactment date.

The Company uses judgment to determine the recognition threshold and measurement attribute for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Any material interest and penalties related to unrecognized tax benefits in income tax expense.

Due to uncertainty surrounding the realization of the favorable tax attributes in future tax returns, the Company has recorded a full valuation allowance against otherwise realizable net deferred tax assets as of June 30, 2011 and December 31, 2010.

Comprehensive Income (Loss)

All components of comprehensive income (loss) are required to be disclosed in the condensed financial statements. Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions, and other events and circumstances from non-owner sources and consists of net loss and changes in unrealized gains and losses on available-for-sale securities. Comprehensive loss was calculated as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
Net loss	$ (17,588)	$ (2,683)	$ (22,597)	$ (5,791)
Change in unrealized gain on marketable securities		6		7
Comprehensive loss	$ (17,588)	$ (2,677)	$ (22,597)	$ (5,784)

Recently Adopted Accounting Standards

In October 2009, the FASB issued ASU 2009-13. ASU 2009-13 amends existing revenue recognition accounting pronouncements that are currently within the scope of FASB ASC Subtopic 605-25 (previously included within EITF 00-21, *Revenue Arrangements with Multiple Deliverables* ("EITF 00-21")). The consensus to ASU 2009-13 provides accounting principles and application guidance on whether multiple deliverables exist, how the arrangement should be separated, and the consideration allocated. This guidance eliminates the requirement to establish the fair value of

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

3. Summary of Significant Accounting Policies (Continued)

undelivered products and services and instead provides for separate revenue recognition based upon management's estimate of the selling price for an undelivered item when there is no other means to determine the fair value of that undelivered item. EITF 00-21 previously required that the fair value of the undelivered item be the price of the item either sold in a separate transaction between unrelated third parties or the price charged for each item when the item is sold separately by the vendor. Under EITF 00-21, if the fair value of all of the elements in the arrangement was not determinable, then revenue was deferred until all of the items were delivered or fair value was determined. This new approach is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. On January 1, 2011, the Company adopted ASU 2009-13 on a prospective basis. The adoption did not have a material impact on the Company's financial position or results of operations, but could have an impact on how the Company accounts for any future collaboration agreements, should the Company enter into any such agreements in the future.

4. Recapitalization

Subsequent to the Reverse Stock Split and prior to the Merger, the Former Operating Company underwent a recapitalization pursuant to which the preferred stock of the Company (Series A Convertible Preferred Stock ("Series A"), Series B Convertible Preferred Stock ("Series B"), and Series C Convertible Preferred Stock ("Series C"), collectively "Old Preferred Stock") was exchanged for a new series of convertible preferred stock (Series A-2 Convertible Preferred Stock ("Series A-2"), Series A-3 Convertible Preferred Stock ("Series A-3"), Series A-4 Convertible Preferred Stock ("Series A-4"), collectively with Series A-5 Convertible Preferred Stock ("Series A-5"), "New Preferred Stock") to the extent that the existing stockholder participated in the Series A-1 Financing in an amount at least at the level its Pro Rata Share, as defined in the Purchase Agreement. According to the amended Articles of Incorporation of the Former Operating Company, stockholders who did not participate in the Series A-1 Financing in an amount at least equal to their Pro Rata Share amount were subject to a forced conversion (the "Forced Conversion") to common stock, at a rate of 1 share of common stock for every 5 shares of old preferred stock to be so converted. As a result, 21,661 shares of Series A, 177,697 shares of Series B and 314,496 shares of Series C converted into 102,767 shares of the Company's common stock on May 17, 2011.

The 9,832,133 shares of Series C convertible preferred stock that remained outstanding after the Forced Conversion, were recapitalized and exchanged for 9,832,133 shares of Series A-2, the 1,422,300 shares of Series B convertible preferred stock that remained outstanding after the Forced Conversion, were recapitalized and exchanged for 1,422,300 shares of Series A-3, and the 40,003 shares of Series A convertible preferred stock that remained outstanding after the Forced Conversion, were exchanged for 40,003 shares of Series A-4. All prior dividends that had accrued on the original Series B and Series C Preferred Stock through May 17, 2011 were forfeited by the holders as part of the recapitalization. In addition, the holders of the original Series B and Series C Preferred Stock waived their contingent redemption rights on such shares.

Certain investors participated in the Series A-1 Financing in an amount in excess of their Pro Rata Share amount and as consideration for investing such excess amount, received that number of additional shares of Series A-1 as set forth within the Purchase Agreement. The Former Operating Company issued 1,327,506 additional shares of Series A-1 in exchange for this additional investment.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

4. Recapitalization (Continued)

In accordance with the Purchase Agreement, the Company received net cash proceeds of $20.7 million as consideration for the issuance of 3,959,351 shares of Series A-1 through June 30, 2011. The issuance of the additional shares did not generate a beneficial conversion feature at the date of issuance or at June 30, 2011.

Subsequent to the recapitalization and financing, pursuant to the Merger, each outstanding share of preferred stock was converted into the right to receive one-tenth of one share of Preferred Stock. After the recapitalization, Series A-1 and Series A-5 (as described in Note 14) financings and the Merger, the Company had the following shares of preferred stock outstanding at June 30, 2011:

Class	Number of Shares
Series A-1	413,254
Series A-2	983,208
Series A-3	142,227
Series A-4	3,998
Series A-5	6,443

The Company has accounted for the recapitalization and exchange of the Old Preferred Stock for the New Preferred Stock as an extinguishment of the Old Preferred Stock due to the significance of the changes to the substantive contractual terms of the preferred stock, which included the forfeiture of accrued dividends on the Series A and B, the removal of the contingent redemption feature pursuant to which the Series B and Series C was redeemable at the option of the holder at a future determinable date, and the addition of a mandatory conversion provision to common stock upon the listing of the Company's Common Stock on a national securities exchange, among other changes. Refer to Note 11 for the rights and preferences on the New Preferred Stock. Accordingly, the Company has recorded the difference between the fair value of the new shares of Preferred Stock issued in the exchange and the carrying value of the old preferred shares as a gain of $60.9 million that was recorded within stockholders' deficit. The Company allocated $8.2 million to additional paid-in capital to recover the amount of additional paid-in capital that had previously been reduced by dividends accreted on Series B and Series C that was forfeited as part of the recapitalization, and the balance of $52.7 million was recorded to accumulated deficit. The gain on extinguishment is reflected as a preferred stock redemption in the calculation of net income available to common stockholders in accordance with Accounting Standards Codification ("ASC") 260 *Earnings Per Share*. The fair value of the Series A-1, Series A-2, Series A-3 and Series A-4 was determined using the probability-weighted expected return method. (See Note 7)

In connection with the Series A-1 Financing, the Former Operating Company issued to a placement agent, and in the Merger, the Company assumed, a warrant to purchase 818 shares of Series A-1 Preferred Stock. The warrant has an exercise price of $81.42 and expires on May 17, 2016. The warrant is classified as a liability on the Company's balance sheet and was recorded as a component of the issuance costs related to the Series A-1 Financing. The Company recorded the warrant at a fair value of $35,000, using the Black-Scholes option pricing model. The revaluation of the warrant at June 30, 2011 was not material to the financial statements.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

5. Net Income (Loss) Per Share

Basic and diluted net income (loss) per share is calculated as follows:

(In thousands, except share and per share numbers)	Three months ended June 30 2011	Three months ended June 30 2010	Six months ended June 30 2011	Six months ended June 30 2010
Numerator:				
Net loss	$ (17,588)	$ (2,683)	$ (22,597)	$ (5,791)
Extinguishment of preferred stock	60,937		60,937	
Accretion of preferred stock dividends	(2,719)	(2,716)	(5,595)	(5,379)
Earnings attributable to participating preferred stockholders	(39,229)		(31,732)	
Earnings (loss) attributable to common stockholders basic	1,401	(5,399)	1,013	(11,170)
Effect of dilutive convertible preferred stock				
Earnings (loss) attributable to common stockholders diluted	$ 1,401	$ (5,399)	$ 1,013	$ (11,170)
Denominator:				
Weighted-average number of common shares used in earnings (loss) per share basic	484,237	320,424	403,967	320,424
Effect of dilutive options to purchase common stock	409,113		261,193	
Effect of dilutive convertible preferred stock	2,281,998		3,125,753	
Weighted-average number of common shares used in earnings (loss) per share diluted	3,175,348	320,424	3,790,913	320,424
Earnings (loss) per share basic	$ 2.89	$ (16.85)	$ 2.51	$ (34.86)
Effect of dilutive options to purchase common stock	(1.33)		(0.98)	
Effect of dilutive convertible preferred stock	(1.13)		(1.25)	
Earnings (loss) per share diluted	$ 0.44	$ (16.85)	$ 0.27	$ (34.86)

The following potentially dilutive securities, prior to the use of the treasury stock method, have been excluded from the computation of diluted weighted-average shares outstanding, as they would be anti-dilutive:

	Three months ended June 30,		Six months ended June 30,	
	2011	2010	2011	2010
Convertible preferred stock	13,557,238	11,808,290	9,267,677	11,808,290
Options to purchase common stock		1,216,718	418,215	1,216,718
Warrants	4,154	266	4,154	266

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

6. Marketable Securities

Available-for-sale marketable securities and cash and cash equivalents consist of the following:

	June 30, 2011			
(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and cash equivalents:				
Cash equivalents	$ 25,336	$	$	$ 25,336
Total	$ 25,336	$	$	$ 25,336

There were no marketable securities at June 30, 2011.

	December 31, 2010			
(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and cash equivalents:				
Cash	$ 232	$	$	$ 232
Money market	6,452			6,452
Corporate commercial paper	2,892			2,892
Corporate debt securities	1,006			1,006
Total	$ 10,582	$	$	$ 10,582
Marketable securities:				
Corporate debt securities	$ 5,023	$	$ (3)	$ 5,020
Corporate commercial paper	2,948	1		2,949
Total	$ 7,971	$ 1	$ (3)	$ 7,969

There were no debt securities that had been in an unrealized loss position for more than 12 months at December 31, 2010. The Company evaluated the securities for other-than-temporary impairment based on quantitative and qualitative factors. The Company considered the decline in market value for these securities to be primarily attributable to current economic conditions. The Company does not intend to sell these securities prior to their maturity and it is not more likely than not that the Company will be required to sell these securities before the recovery of their amortized costs bases, which may be at maturity.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

7. Fair Value Measurements

The following tables summarize the financial instruments measured at fair value on a recurring basis in the accompanying consolidated balance sheet as of June 30, 2011 based on the criteria discussed in Note 3:

	June 30, 2011			
(In thousands)	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Cash and cash equivalents	$ 25,336	$	$	$ 25,336

	June 30, 2011			
(In thousands)	**Level 1**	**Level 2**	**Level 3**	**Total**
Liabilities				
Warrant liability	$	$	$ 217	$ 217
Other liability			3,421	3,421
			$ 3,638	$ 3,638

Fair value for Level 1 is based on quoted market prices. Fair value for Level 2 is based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets. Inputs are obtained from various sources including market participants, dealers and brokers.

The warrant liability represents the liability for the warrants issued to the placement agent (Note 4) and to the lenders in connection with the Loan and Security Agreement (Note 10). The warrant liability is calculated using the Black-Scholes option pricing method. This method of valuation includes using inputs such as the valuation of the Company's various classes of preferred stock, historical volatility, the term of the warrant and risk free interest rates. The fair value of the Company's shares of common and preferred stock was estimated using the probability-weighted expected return method, or PWERM, which considers the value of preferred and common stock based upon analysis of the future values for equity assuming various future outcomes. Accordingly, share value is based upon the probability-weighted present value of expected future net cash flows, considering each of the possible future events, as well as the rights and preferences of each share class. PWERM is complex as it requires numerous assumptions relating to potential future outcomes of equity, hence, the use of this method can be applied: (i) when possible future outcomes can be predicted with reasonable certainty; and (ii) when there is a complex capital structure (i.e., several classes of preferred and common stock). The Company had previously used the Option-pricing method to value its common stock. The Option-pricing method treats common stock and preferred stock as call options on the enterprise's value, with exercise prices based on the liquidation preference of the preferred stock. The Company utilized the PWERM approach in its most recent valuation based on the Company's expectations regarding the time to becoming a listed, publicly-traded entity as well as the recent Series A-1 financing and the initiation of the BA058 Injection Phase 3 study that resolved sufficient uncertainty regarding a discrete range of outcomes that could be identified and evaluated. As such the valuation of the warrant liability was determined to be a Level 3 valuation.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

7. Fair Value Measurements (Continued)

The other liability represents the liability to issue shares of Series A-6 to Nordic for services rendered in connection with the Company's Phase 3 clinical study of BA058 Injection (Note 14). The liability is calculated based upon the number of shares earned by Nordic through the performance of clinical trial services multiplied by the estimated fair value of the Company's Series A-6 at each reporting date. The estimated fair value of the Series A-6 is determined using the PWERM method described above.

The following table provides a roll forward of the fair value of the liabilities, where fair value is determined by Level 3 inputs:

(In thousands)	
Balance at January 1, 2011	$
Additions	3,638
Change in fair value	
Balance at June 30, 2011	$ 3,638

8. Accrued Expenses

Accrued expenses consist of the following:

(In thousands)	**June 30, 2011**	**December 31, 2010**
Research costs	$ 2,672	$ 1,913
Payroll and employee benefits	764	473
Professional fees	701	243
Vacation	79	79
Restructuring		63
Accrued interest on notes payable	62	
Total accrued expenses	$ 4,278	$ 2,771

9. Commitments

In September 2010, the Company recorded restructuring charges of $0.2 million related to lease termination costs associated with vacating its laboratory space. The restructuring liability is included in accrued expenses in the balance sheet at December 31, 2010. All remaining payments were made by February 28, 2011.

The following table displays the restructuring activity and liability balances:

(In thousands)	
Balance at December 31, 2010	$ 63
Payments	$ (63)
Balance at June 30, 2011	$

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

9. Commitments (Continued)

On January 14, 2011, the Company signed a sublease agreement for office space in Cambridge, Massachusetts that expires on July 31, 2011. Monthly rental payments under this sublease are $9,000 and the Company moved into the new space in February 2011. On July 15, 2011, the Company entered into an operating lease agreement to remain in the same Cambridge, Massachusetts location. The term of the lease is August 1, 2011 through July 31, 2014. Monthly rental payments under the new lease are approximately $15,000 for the first 12 months and approximately $16,000 for the 24 months thereafter.

10. Loan and Security Agreement

On May 23, 2011, the Company entered into a loan and security agreement (the "Loan and Security Agreement") with Oxford Finance Corporation and General Electric Capital Corporation (collectively, the "Lender") pursuant to which the Lender agreed to lend the Company up to $25.0 million. Upon entering into the Loan and Security Agreement, the Company borrowed $6.3 million from the Lender ("Term Loan A"). Under the terms of the Loan and Security Agreement, the Company may, in its sole discretion, borrow from the Lender up to an additional $6.3 million, at any time on or before November 22, 2011 ("Term Loan B") and up to an additional $12.5 million, at any time on or before May 22, 2012 ("Term Loan C", collectively with Term Loan A and Term Loan B, the "Term Loans"). The Company's obligations under the Loan and Security Agreement are secured by a first priority security interest in substantially all of the assets of the Company.

The Company is required to pay interest on Term Loan A on a monthly basis through and including December 1, 2011. Beginning December 1, 2011 through the maturity of Term Loan A on November 22, 2014, the Company will be required to make payments of outstanding principal and interest on Term Loan A in 36 equal monthly installments. Interest is payable on Term Loan A at an annual interest rate of 10%. If the Company enters into Term Loan B or Term Loan C, interest on each term loan will accrue at an annual fixed rate equal to greater of (i) 10% or (ii) the sum of (a) the three year Treasury Rate as published the Board of Governors of the Federal Reserve System in Federal Reserve Statistical Release H.15 entitled "Selected Interest Rates", plus (b) 9.19%. Payments due under Term Loan B or Term Loan C, if borrowed, are interest only, payable monthly, in arrears, for six months following the funding of each term loan, and will consist of 36 and 30 payments of principal and interest, respectively, which are payable monthly, in arrears, and all unpaid principal and accrued and unpaid interest on Term Loan B or Term Loan C would be due and payable 42 months after the funding of any each term loan.

Upon the last payment date of the amounts borrowed under the Loan and Security Agreement, whether on the maturity date of one of the Term Loans, on the date of any prepayment or on the date of acceleration in the event of a default, the Company will be required to pay the Lender a final payment fee equal to 3.5% of any of the Term Loans borrowed. In addition, if the Company repays all or a portion of the Term Loans prior to maturity, it will pay the Lender a prepayment fee of 3% of the total amount prepaid if the prepayment occurs prior to the first anniversary of the funding of the relevant Term Loan, 2% of the total amount prepaid if the prepayment occurs between the first and second anniversary of the funding of the relevant Term Loan, and 1% of the total amount prepaid if the prepayment occurs on or after the second anniversary of the funding of the relevant Term Loan.

Upon the occurrence of an event of default, including payment defaults, breaches of covenants, a material adverse change in the collateral, the Company's business, operations or condition (financial or otherwise) and certain levies, attachments and other restraints on the Company's business, the interest

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

10. Loan and Security Agreement (Continued)

rate will be increased by five percentage points and all outstanding obligations will become immediately due and payable. The Loan and Security Agreement also contains a subjective acceleration clause, which provides the Lender the ability to demand repayment of the loan early upon a material adverse change, as defined. The portion of the Term Loan A that is not due within 12 months of June 30, 2011 has been classified as long-term, as the Company believes a material adverse change is remote.

In connection with the Loan and Security Agreement, the Company issued to the Lender a warrant to purchase 3,070 shares of the Company's Series A-1 Preferred Stock (the "Warrant"). The Warrant is exercisable, in whole or in part, immediately, and has a per share exercise price of $81.42 and may be exercised on a cashless basis. The Warrant expires on May 23, 2021. The exercise price may be adjusted in the event the Company issues shares of the Series A-1 at a price lower than $81.42 per share. The warrant is classified as a liability in the Company's balance sheet and will be remeasured at its estimated fair value at each reporting period. The changes in fair value are recorded as other income (expense) in the Statement of Operations.

The initial fair value of the Warrant issued in connection with Term Loan A was $0.2 million and was recorded as a discount to Term Loan A. The fair value of the warrant at June 30, 2011 was $0.2 million. The Company also paid the Lender a facility fee of $0.3 million and reimbursed the Lender certain costs associated with the Loan and Security Agreement of $0.1 million, both of which were also recorded as a discount to Term Loan A. The discount is being amortized to interest expense over the 42 month period that Term Loan A is outstanding using the effective interest method.

Future principal payments under the Loan and Security Agreement at June 30, 2011, are as follows:

(In thousands)	
2011	$ 156
2012	1,875
2013	1,875
2014	2,344
Total	$ 6,250

11. Convertible Preferred Stock

The rights, preferences, and privileges of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5 and Series A-6 are as follows:

Conversion

Each preferred stockholder has the right, at their option at any time, to convert any such shares of Preferred Stock into such number of fully paid shares as is determined by dividing the original purchase price of $81.42 by the conversion price ("Optional Conversion"). The conversion price of the Preferred Stock as of June 30, 2011 was $8.142 per share (the "Conversion Price"), which represents a conversion ratio of one share of Preferred Stock into ten shares of Common Stock. Upon the Optional Conversion, the holder of the converted Preferred Stock is entitled to payment of all accrued, whether or not declared, but unpaid dividend in shares of the Common Stock of the Company at the then effective conversion price of shares of Preferred Stock.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

11. Convertible Preferred Stock (Continued)

In the event an investor does not timely and completely fulfill their future funding obligations as defined in the Purchase Agreement (as described in Note 3) (i) the shares of Preferred Stock then held by the investor automatically convert into shares of the Company's common stock at a rate of one share of common stock for every ten shares of Preferred Stock to be converted and (ii) the Company has the right to repurchase all of the shares of Common Stock issued upon conversion at a purchase price equal to the par value of the repurchased shares of Common Stock ("Subsequent Closing Adjustment"). Upon a Subsequent Closing Adjustment, the holder of the converted Preferred Stock is entitled to payment of any declared, accrued, but unpaid dividends in shares of the Common Stock of the Company.

Each share of Preferred Stock is automatically convertible into fully paid and non-assessable shares of Common Stock at the applicable Conversion Price then in effect upon (i) a vote of the holders of at least 70% of the outstanding shares of Series A-1, Series A-2 and Series A-3 to convert all shares of Preferred Stock or (ii) the Common Stock becoming listed for trading on a national stock exchange ("Special Mandatory Conversion"). Upon a Special Mandatory Conversion, all accrued, whether or not declared, but unpaid dividends shall be paid in cash or shares at the discretion of the Company's Board of Directors, at the then effective conversion price of shares of Preferred Stock.

Redemption

The shares of Preferred Stock are not currently redeemable.

Dividends

Holders of shares of Series A-1 are entitled to receive dividends at a rate of 8% per annum, compounding annually, which accrue on a quarterly basis commencing on the date of issuance of the shares of Series A-1. Dividends are payable, as accrued, upon liquidation, event of sale, and conversion to common stock as described above. The holders of shares of Series A-1 are also entitled to dividends declared or paid on any shares of Common Stock.

Following payment in full of required dividends to the holders of Series A-1, holders of Series A-2 are entitled to receive dividends at a rate of 8% per annum, compounding annually, which accrue on a quarterly basis commencing on the date of issuance of the shares of Series A-2. Dividends are payable, as accrued, upon liquidation, event of sale, and conversion to common stock as described above. The holders of shares of Series A-2 are also entitled to dividends declared or paid on any shares of Common Stock.

Following payment in full of required dividends to the holders of Series A-1 and Series A-2, holders of Series A-3 are entitled to receive dividends at a rate of 8% per annum, compounding annually, which accrue on a quarterly basis commencing on the date of issuance of the shares of Series A-3. Holders of Series A-5 are entitled to receive the Series A-5 Accruing Dividend paid in shares of Series A-6 as described in Note 14. Holders of shares of Series A-6 are entitled to receive dividends on shares of Series A-6, when and if declared by the Board of Directors at a rate to be determined by the Board of Directors. Dividends are payable, as accrued, upon liquidation, event of sale and conversion to Common Stock as described above. The holders of shares of Series A-3, A-5 and A-6 are also entitled to dividends declared or paid on any shares of Common Stock.

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

11. Convertible Preferred Stock (Continued)

Following payment in full of required dividends to the holders of Series A-1, Series A-2, Series A-3, and Series A-5, holders of Series A-4 are entitled to receive dividends on shares of Series A-4, when and if declared by the Board of Directors at a rate to be determined by the Board of Directors. Dividends are payable, as accrued, upon liquidation, event of sale, and conversion to Common Stock as described above. The holders of shares of Series A-4 are also entitled to dividends declared or paid on any shares of Common Stock.

Dividends on the Preferred Stock are payable, at the sole discretion of the Board of Directors, in cash or in shares of the Company's common stock, when and if declared by the Board of Directors, upon liquidation or upon an event of sale at the current market price of shares of common stock. Upon conversion, dividends are payable in shares of the common stock at the then effective conversion price of shares of Preferred Stock.

The Company has accrued dividends of $0.3 million, $0.8 million and $0.1 million on Series A-1, A-2 and A-3, respectively, as of June 30, 2011.

Voting

The preferred stockholders are entitled to vote together with the holders of the Common Stock as one class on an as-if converted basis.

In addition, as long as the shares of Series A-1 are outstanding, the holders of Series A-1, voting as a separate class, have the right to elect two members of the Company's Board of Directors.

Liquidation

The shares of Series A-1 rank senior to all other classes of Preferred Stock. Series A-2 ranks junior to Series A-1 and senior to Series A-3, Series A-4, Series A-5 and Series A-6. Series A-3, Series A-5 and Series A-6 rank equally but junior to Series A-1 and Series A-2 and senior to Series A-4. Series A-4 ranks senior to the Company's Common Stock.

In the event of a liquidation, dissolution, or winding-up of the Company, the holders of the Series A-1 are entitled to be paid first out of the assets available for distribution, before any payment is made to the Series A-2, Series A-3, Series A-4, Series A-5 and Series A-5. Payment to the holders of Series A-1 shall consist of the original issuance price of $81.42, plus all accrued but unpaid dividends. After the distribution to the holders Series A-1, the holders of Series A-2, will be entitled to receive an amount per share equal to the original purchase price per share of $81.42, plus any accrued but unpaid dividends. After the distribution to the holders Series A-1 and Series A-2, the holders of Series A-3, Series A-5 and Series A-6, will be entitled to receive an amount per share equal to the original purchase price per share of $81.42, plus any accrued but unpaid or declared and unpaid dividends, as appropriate. After the distribution to the holders Series A-1,Series A-2, Series A-3, Series A-5 and Series A-6, the holders of Series A-4, will be entitled to receive an amount per share equal to the original purchase price per share of $81.42, plus any declared and unpaid dividends. If the assets of the Company are insufficient to pay the full preferential amounts to the holders of Series A-1, the assets will be distributed ratably among the holders of Series A-1 in proportion to their aggregate liquidation preference amounts. If the assets of the Company are insufficient to pay the full preferential amounts to the holders of Series A-2, the assets will be distributed ratably among the holders of Series A-2 in proportion to their aggregate liquidation preference amounts. If the assets of the Company are

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

11. Convertible Preferred Stock (Continued)

insufficient to pay the full preferential amounts to the holders of Series A-3, Series A-5 and Series A-6, the assets will be distributed ratably among the holders of Series A-3, Series A-5 and Series A-6 in proportion to their aggregate liquidation preference amounts. If the assets of the Company are insufficient to pay the full preferential amounts to the holders of Series A-4, the assets will be distributed ratably among the holders of Series A-4 in proportion to their aggregate liquidation preference amounts. After all liquidation preference payments have been made to the holders of the Preferred Stock, the holders of the Preferred Stock shall participate in the distribution of the remaining assets with the holders of the Company's Common Stock on an as-if converted basis.

In the event of, and simultaneously with, the closing of an event of sale of the Company (as defined in the Company's Amended Articles of Incorporation), the Company shall redeem all of the shares of Series A-1, Series A-2, Series A-3, Series A-4, Series A-5 and Series A-6 then outstanding at the Special Liquidation Price, as defined. If the event of sale involves consideration other than cash, the Special Liquidation Price may be paid with such consideration having a value equal to the Special Liquidation Price. The Special Liquidation Price shall be equal to an amount per share, which would be received by each Preferred Stockholder if, in connection with the event of sale, all the consideration paid in exchange for the assets or the shares of capital stock of the Company was actually paid to and received by the Company, and the Company was immediately liquidated thereafter and its assets distributed pursuant to the liquidation terms above.

Registration Rights

In accordance with the Amended and Restated Stockholders Agreement (the "Stockholders Agreement"), the Company is required to file a registration statement with the Securities and Exchange Commission (the "SEC") covering the registration of at least 85% of the outstanding shares of the Preferred Stock within 60 days of the closing of the Merger. Pursuant to the terms of the Stockholders Agreement if the registration statement is not filed within 60 days of the closing of the Merger or if the registration statement has not been declared effective by the SEC at the later of (i) 90 days after the closing date of the Merger or (ii) in the event the SEC reviews the registration statement and has comments, 180 days after the closing of the Merger, the Company will be required pay liquidated damages on a monthly basis equal to 1% of the aggregate purchase price paid by the holders of the Preferred Stock. The total amount of liquidated damages will be limited to 16% of the aggregate purchase price paid by the holders of the Preferred Stock.

12. Stock-based Compensation

2003 Long-Term Incentive Plan

The 2003 Long-Term Incentive Plan (the "Incentive Plan") provides for the granting of incentive stock options, nonqualified options and stock grants to key employees and consultants of the Company. The exercise price of the incentive stock options, as determined by the Board of Directors, must be at least 100% (110% in the case of incentive stock options granted to a stockholder owning in excess of 10% of the Company's common stock) of the common stock fair value as of the date of the grant. The provisions of the Incentive Plan limit the exercise of incentive stock options, but in no case may the exercise period extend beyond ten years from the date of grant (five years in the case of incentive stock options granted to a stockholder owning in excess of 10% of the Company's common stock). Stock

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

12. Stock-based Compensation (Continued)

options generally vest over a four-year period. The Company has authorized 2,015,666 shares of common stock for issuance under the Incentive Plan.

A summary of stock option activity is as follows:

(In thousands, except for per share amounts)	Shares	Weighted-Average Exercise Price	Weighted-Average Contractual Life (In Years)	Aggregate Intrinsic Value
Options outstanding at December 31, 2010	1,462	$ 1.20	$ 7.28	$ 1,715
Granted				
Exercised	(166)	0.92		
Cancelled	(12)	1.36		
Options outstanding at June 30, 2011	1,284	1.20	6.72	2,253
Options exercisable at June 30, 2011	962	1.18	6.15	1,713
Options vested or expected to vest at June 30, 2011	1,273	$ 1.20	$ 6.72	$ 2,235

The total grant-date fair value of stock options that vested during the three- and six-month periods ended June 30, 2011 was approximately $48,000 and $86,000, respectively. The aggregate intrinsic value of options that vested during the three- and six-month periods ended June 30, 2011 was approximately $109,000 and $203,000, respectively.

As of June 30, 2011, there was approximately $29,000 of total unrecognized compensation expense related to unvested employee share-based compensation arrangements, which is expected to be recognized over a weighted-average period of approximately 0.6 years, respectively.

During 2009 and 2010, the Company's Board of Directors granted 1,666 and 10,000 stock options, respectively, to a Scientific Advisory Board member of the Company. There were no stock options granted in the three- and six-month periods ended June 30, 2011. The Company records stock-based compensation expense for such options as they vest, and remeasures the fair value of the options at each reporting period. During the three- and six-month periods ended June 30, 2011, the Company recorded approximately $39,000 and $18,000 of stock-based compensation expense, respectively.

13. License Agreements

On September 27, 2005, the Company entered into a license agreement (the Ipsen Agreement), as amended, with SCRAS S.A.S, a French corporation on behalf of itself and its affiliates (collectively, Ipsen). Under the Ipsen Agreement, Ipsen granted to the Company an exclusive right and license under certain Ipsen compound technology and related patents to research, develop, manufacture and commercialize certain compounds and related products in all countries, except Japan and (subject to certain co-marketing and co-promotion rights retained by Ipsen) France. BA058 (the Company's bone growth drug) is subject to the Ipsen Agreement. Ipsen also granted the Company an exclusive right and license under the Ipsen compound technology and related patents to make and have made compounds or product in Japan. Ipsen also granted the Company an exclusive right and license under certain Ipsen formulation technology and related patents solely for purposes of enabling the Company to develop,

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

13. License Agreements (Continued)

manufacture and commercialize compounds and products covered by the compound technology license in all countries, except Japan and (subject to certain co-marketing and pro-promotion rights retained by Ipsen) France. In consideration for these licenses, the Company made a nonrefundable, non-creditable payment of $0.3 million to Ipsen, which was expensed during 2005. The Ipsen Agreement provides for further payments to Ipsen upon the achievement of certain development and commercialization milestones specified in the Ipsen Agreement, and for the payment of royalties on net sales of any product that includes the compound licensed from Ipsen or any analog thereof.

If the Company sublicenses the rights licensed from Ipsen, then the Company will also be required to pay Ipsen a percentage of certain payments received from such sublicensee (in lieu of milestone payments not achieved at the time of such sublicense). In connection with the Ipsen Agreement, the Company recorded approximately $0.2 million, $24,000, $0.3 million, and $44,000 in research and developments costs in the three-month periods ended June 30, 2011 and 2010, and the six-month periods ended June 30, 2011 and 2010, respectively. The costs were incurred by Ipsen and charged to the Company for the manufacture of the clinical supply of the licensed compound.

On May 11, 2011, the Company entered into a second amendment to the Ipsen Agreement pursuant to which Ipsen agreed to accept shares of Series A-1 in lieu of cash as consideration for a milestone payment due to Ipsen following the initiation of the first BA058 Phase 3 study. The number of shares of Series A-1 to be issued to Ipsen was determined based upon the U.S. dollar exchange rate for the euro two business days prior to closing. On May 17, 2011, the Company issued 17,326 shares of Series A-1 to Ipsen to settle the obligation. Accordingly, the Company recorded research and development expense of $1.4 million during the three- and six-month periods ended June 30, 2011. The expense represents the fair value of the Series A-1 shares of $81.42 per share.

14. Research Agreements

The Company entered into a Letter of Intent with Nordic on September 3, 2010, pursuant to which it funded preparatory work by Nordic in respect of a Phase 3 clinical study of BA058 Injection. The Letter of Intent was extended on December 15, 2010 and on January 31, 2011. On March 29, 2011, the Company and Nordic entered into a Clinical Trial Services Agreement, a Work Statement NB-1 (the "Work Statement") under such Clinical Trial Services Agreement and a related Stock Issuance Agreement. Pursuant to the Work Statement, Nordic is managing the Phase 3 clinical study (the "Clinical Study") of BA058 Injection and Nordic will be compensated for such services in a combination of cash and shares of Series A-6.

Pursuant to the Work Statement, the Company is required to make certain per patient payments denominated in both euros and U.S. dollars for each patient enrolled in the Clinical Study followed by monthly payments for the duration of the study and final payments in two equal euro-denominated installments and two equal U.S. Dollar-denominated installments. Changes to the Clinical Study schedule may alter the timing, but not the aggregate amounts, of the payments. The Work Statement provides for a total of 33.9 million of euro-denominated payments and 4.9 million of U.S. Dollar-denominated payments over the course of the Clinical Study.

Pursuant to the Stock Issuance Agreement, Nordic agreed to purchase the equivalent of €0.4 million of Series A-5 Preferred Stock at $8.142 per share. 64,430 shares of Series A-5 were issued to Nordic on May 17, 2011, which generated proceeds of $0.5 million to the Company. These shares

Table of Contents

Radius Health, Inc.

Notes to Financial Statements (Continued)

14. Research Agreements (Continued)

were exchanged in the Merger for an aggregate of 6,443 shares of Series A-5 through a reverse stock split.

The Stock Issuance Agreement provides that Nordic is entitled to receive quarterly stock dividends, payable in shares of Series A-6, having an aggregate value of up to €36.8 million (the "Series A-5 Accruing Dividend"). This right to receive the Series A-5 Accruing Dividend is non-transferrable and will remain with Nordic in the event it sells the shares of Series A-5 or in the event the shares of Series A-5 are converted into common stock in accordance with the Company's amended Articles of Incorporation.

The Series A-5 Accruing Dividend is determined based upon the estimated period that will be required to complete the Clinical Study. On the last Business Day of each calendar quarter (each, an "Accrual Date"), beginning with the quarter ended June 30, 2011, the Company has a liability to issue shares of Series A-6 to Nordic that is referred to as the Applicable Quarterly Amount and is equal to (A) €36.8 million minus the aggregate value of any prior Series A-5 Accruing Dividend accrued divided by (B) the number of calendar quarters it will take to complete the Clinical Study. To calculate the aggregate number of shares of Series A-6 due to Nordic in each calendar quarter, the Company converts the portion of €36.8 million to accrue in such calendar quarter into U.S. dollars using the simple average of the exchange rate for buying U.S. dollars with euros for all Mondays' in such calendar quarter. The Company then calculates the aggregate number of shares of Series A-6 to accrue in such calendar quarter by dividing the U.S. dollar equivalent of the Applicable Quarterly Amount, by the fair market value as of the applicable Accrual Date, and rounding down the resulting quotient to the nearest whole number. Such shares due to Nordic will be issued when declared or paid by the Company's Board of Directors, who are required to do so upon Nordic's request, or upon an event of sale. As of June 30, 2011, 57,987 shares of Series A-6 are due to Nordic.

Prior to the issuance of shares of Series A-6 to Nordic, the liability to issue shares of Series A-6 will be accounted for as a liability in the Company's Balance Sheet. As of June 30, 2011, the fair value of the liability was $3.4 million based upon the fair value of the Series A-6 as determined using PWERM. Changes in the value from the date of accrual to the date of issuance of the shares are recorded as a gain or loss in other income (expense) in the Statement of Operations.

The Company recognizes research and development expense for the amounts due to Nordic under the Work Statement ratably over the estimated per patient treatment period beginning upon enrollment in the Clinical Study, or a twenty-month period. The Company recorded $10.6 million and $11.4 million in the three- and six-month periods ended June 30, 2011 reflecting costs incurred for preparatory and other start-up costs to initiate the Clinical Study in April 2011. The Company recorded an additional $0.5 million of research and development expense in the six-month period ended June 30, 2011 for per patient costs incurred for patients that had enrolled in the Clinical Study as of June 30, 2011. As of June 30, 2011, in addition to the $3.4 million liability that is reflected in Other Liabilities on the Balance Sheet that will be settled in shares of Series A-6, as noted above, the Company has a liability to Nordic of approximately $1.6 million that is included in accrued expenses on the Balance Sheet.

The Company is also responsible for certain pass through costs in connection with the Clinical Study. Pass through costs are expensed as incurred or upon delivery. The Company recognized research and development expense of $1.8 million and $2.4 million for pass through costs in the three- and six-month periods ended June 30, 2011.

Table of Contents

5,320,600 Shares
Common Stock

PROSPECTUS

Table of Contents

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Other Expenses of Issuance and Distribution

The following table indicates the expenses to be incurred in connection with the offering described in this Registration Statement, all of which will be paid by us. All amounts are estimates, other than the SEC registration fee.

SEC Registration Fee	$	5,032
Accounting fees and expenses	$	36,493
Printing and engraving expenses		130,000
Legal fees and expenses	$	343,130
Total	$	514,655

Indemnification of Directors and Officers

Section 145 of the DGCL permits indemnification of officers, directors and other corporate agents under certain circumstances and subject to certain limitations. Articles 7 and 8 of our certificate of incorporation provides that we will indemnify, to the fullest extent permitted by Section 145 of the DGCL, as amended from time to time, each person that such section grants the Corporation power to indemnify, including in circumstances in which indemnification is otherwise discretionary under Delaware law. In addition, we have entered into separate indemnification agreements with our directors and executive officers which would require us, among other things, to indemnify them against certain liabilities which may arise by reason of their status or service (other than liabilities arising from willful misconduct of a culpable nature). The indemnification provisions in our certificate of incorporation and the indemnification agreements to be entered into between us and our directors and executive officers may be sufficiently broad to permit indemnification of our directors and executive officers for liabilities (including reimbursement of expenses incurred) arising under the Securities Act. We also intend to maintain director and officer liability insurance, if available on reasonable terms, to insure our directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances.

Recent Sales of Unregistered Securities

The following summarizes all sales of unregistered securities by the Former Operating Company and us, as applicable, since August 2008, adjusted to reflect the Post-Reverse Split numbers, where applicable:

On May 17, 2011, the Former Operating Company issued 9,832,133 shares of Series A-2 Convertible Preferred Stock, 1,422,300 shares of Series A-3 Convertible Preferred Stock, 40,003 Shares of Series A-4 Convertible Preferred stock and 555,549 shares of Common Stock to former stockholders of the Former Operating Company pursuant to a recapitalization, including a reverse split, and completed a private placement of 2,631,845 shares of Series A-1 Preferred Stock to a group of 18 accredited investors, including former stockholders of the Former Operating Company, all for an aggregate purchase price of $21,428,482. In addition, we issued 173,263 shares of Series A-1 Preferred Stock to Ipsen in lieu of a $1,000,000 cash milestone payment on May 17, 2011.

On May 17, 2011, the Former Operating Company issued 64,430 shares Series A-5 Preferred Stock to Nordic for an aggregate purchase price of $525,153.53.

On May 17, 2011, the Company issued warrants to purchase an aggregate of 8,188 shares of Series A-1 Preferred Stock to Leerink Swann LLC as consideration for services rendered in

Table of Contents

connection with the Series A-1 Financing pursuant to Section 4(2) of the Securities Act. No separate amount of consideration was paid for the issuance of the warrant under the agreement.

On May 17, 2011, the Company issued 413,254 shares of A-1 Convertible Preferred Stock, 983,208 shares of Series A-2 Convertible Preferred Stock, 142,227 shares of Series A-3 Convertible Preferred Stock, 3,998 shares of Series A-4 Convertible Preferred stock, 6,443 shares of Series A-5 Convertible Preferred Stock and 555,549 shares of Common Stock in the Merger to the former stockholders of the Former Operating Company in exchange for shares held in the Former Operating Company pursuant to Section 4(2) of the Securities Act and Rule 506 to 34 accredited investors and 17 investors who were not accredited and who the Company believed immediately prior to making any sale that such purchaser had such knowledge and experience in financial and business matters that he was capable of evaluating the merits and risks of the prospective investment.

On May 23, 2011, the Company issued warrants to purchase an aggregate of 3,070 shares of Series A-1 Convertible Preferred Stock to two lenders, both of whom were accredited investors, in connection with a debt financing, as described above in the section entitled "Description of the Business of Radius Health, Inc." under the heading "Recent Developments", pursuant to Section 4(2) of the Securities Act and Rule 506. No separate amount of consideration was paid for the issuance of the warrant under the loan agreement.

The offers, sales, and issuances of the securities described above were deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act or Regulation D promulgated thereunder as transactions by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business, stockholder, other relationships or the delivery of an information statement, to information about us.

In addition to the foregoing, from November 2003 until May 23, 2011, the Company issued options pursuant to the 2003 Long Term Incentive Plan of the Former Operating Company to purchase an aggregate of 1,755,197 shares of Common Stock to employees, consultants and directors with a range of exercise prices from $0.15 to $1.50 per share. The issuance of options described above were deemed to be exempt from registration under the Securities Act in reliance upon Rule 701 promulgated under Section 3(b) of the Securities Act, as transactions pursuant to a written compensation benefit plan and contracts relating to compensation as provided under Rule 701.

Exhibits and Financial Statement Schedules

(a) *Exhibits*

Exhibit No.	Description
2.1(11)	Agreement and Plan of Merger, dated April 25, 2011
3.1	Certificate of Incorporation, as amended
3.2(10)	By-Laws, as amended
4.1(2)	Amended and Restated Stockholders' Agreement, dated May 17, 2011, by and among the Company, as successor to Radius Health, Inc., and the Stockholders listed therein
4.2	Certificate of Designations of the Company filed herewith as Exhibit 3.1 hereof
5.1	Opinion of Bingham McCutchen LLP

Table of Contents

Exhibit No.	Description
10.1(9)(10)	Clinical Trial Services Agreement and Work Statement NB-1, dated March 29, 2011, by and between the Company, as successor to Radius Health, Inc., and Nordic BioScience Clinical Development VII A/S
10.2(7)(9)	Amended and Restated Stock Issuance Agreement, dated May 16, 2011, by and between the Company, as successor to Radius Health, Inc., and Nordic BioScience Clinical Development VII A/S
10.3(2)(9)	Side Letter, dated March 29, 2011, by and between the Company, as successor to Radius Health, Inc., and Nordic BioScience Clinical Development VII A/S
10.4(9)(10)	License Agreement, dated September 27, 2005, by and between the Company, as successor to Nuvios, Inc., and SCRAS SAS, on behalf of itself and its Affiliates
10.5(9)(10)	Pharmaceutical Development Agreement, dated January 2, 2006, by and between the Company, as successor to Radius Health, Inc., and Beaufour Ipsen Industrie SAS
10.6(9)(10)	Amendment No. 1 to Pharmaceutical Development Agreement, dated January 1, 2007, by and between the Company, as successor to Radius Health, Inc., and Beaufour Ipsen Industrie SAS
10.7(2)(9)	License Agreement Amendment No. 1, dated September 12, 2007, by and between the Company, as successor to Radius Health, Inc., and SCRAS SAS
10.8(2)(9)	Amendment No. 2 to Pharmaceutical Development Agreement, dated January 1, 2009, by and between the Company, as successor to Radius Health, Inc., and Beaufour Ipsen Industrie SAS
10.9(9)(10)	Amendment No. 3 to Pharmaceutical Development Agreement, dated June 16, 2010, by and between the Company, as successor to Radius Health, Inc., and Beaufour Ipsen Industrie SAS
10.10(9)(10)	License Agreement Amendment No. 2, dated May 11, 2011, by and between the Company, as successor to Radius Health, Inc., and Ipsen Pharma SAS
10.11(9)(10)	Series A-1 Convertible Preferred Stock Issuance Agreement, dated May 11, 2011, by and between the Company, as successor to Radius Health, Inc., and Ipsen Pharma SAS
10.12(9)(10)	Development and Manufacturing Services Agreement, dated October 16, 2007, by and between the Company, as successor to Radius Health, Inc., and LONZA Sales Ltd.
10.13(9)(10)	Work Order No. 2, dated January 15, 2010, by and between the Company, as successor to Radius Health, Inc., and LONZA Sales Ltd.
10.14(2)(9)	Amendment No. 3 to Work Order No.2, dated December 15, 2010, by and between the Company, as successor to Radius Health, Inc., and LONZA Sales Ltd.
10.15(2)(9)	Development and Clinical Supplies Agreement, dated June 19, 2009, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.16(2)(9)	Amendment No. 1, dated December 31, 2009, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.17(2)(9)	Amendment No. 2, dated September 16, 2010, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.

Table of Contents

Exhibit No.	Description
10.18(2)(9)	Amendment No. 3, dated September 29, 2010, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.19(9)(10)	Change Order Form Amendment No. 5, dated February 4, 2011, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.20(2)(9)	Amendment No. 4, dated March 2, 2011, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.21(2)(9)	Laboratory Services and Confidentiality Agreement, dated March 31, 2004, by and between the Company, as successor to Nuvios, Inc., and Charles River Laboratories, Inc.
10.22(9)(10)	First Amendment to Laboratory Services and Confidentiality Agreement, dated November 7, 2008, by and between the Company, as successor to Radius Health, Inc., and Charles River Laboratories, Inc.
10.23(2)(9)	Letter of Payment Authorization, dated November 20, 2010, by and between the Company, as successor to Radius Health, Inc., and Charles River Laboratories Preclinical Services Montréal Inc.
10.24(9)(10)	Letter of Payment Authorization, dated February 7, 2011, by and between the Company, as successor to Radius Health, Inc., and Charles River Laboratories Preclinical Services Montréal Inc.
10.25(9)(10)	License Agreement, dated June 29, 2006, by and between the Company, as successor to Radius Health, Inc., and Eisai Co., Ltd.
10.26(10)	Series A-1 Convertible Preferred Stock Purchase Agreement, dated April 25, 2011, by and among the Company, as successor to Radius Health, Inc., and the Investors listed therein
10.27(2)(4)	Radius Health, Inc. (f/k/a Nuvios, Inc.) 2003 Long-Term Incentive Plan, assumed in the Merger
10.28(2)(4)	Radius Health, Inc. First Amendment to 2003 Long-Term Incentive Plan effective as of December 15, 2006, assumed in the Merger
10.29(2)(4)	Radius Health, Inc. Second Amendment to 2003 Long-Term Incentive Plan effective as of March 28, 2008, assumed in the Merger
10.30(2)(4)	Radius Health, Inc. Third Amendment to 2003 Long-Term Incentive Plan effective as of November 14, 2008, assumed in the Merger
10.31(2)	Radius Health, Inc. 2003 Long-Term Incentive Plan Form of Stock Option Agreement
10.32(2)(4)	Radius Health, Inc. (f/k/a Nuvios, Inc.) 2003 Long-Term Incentive Plan Stock Option Agreement, dated October 28, 2004, by and between the Company, as successor to Nuvios, Inc., and Richard Lyttle for Option No. 04-103
10.33(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated July 12, 2007, by and between the Company, as successor to Radius Health, Inc., and Richard Lyttle for Option No. 07-08
10.34(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated May 8, 2008, by and between the Company, as successor to Radius Health, Inc., and Richard Lyttle for Option No. 08-09

Table of Contents

Exhibit No.	Description
10.35(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated December 3, 2008, by and between the Company, as successor to Radius Health, Inc., and Richard Lyttle for Option No. 08-14
10.36(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated February 15, 2006, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea for Option No. 06-07
10.37(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated July 12, 2007, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea for Option No. 07-07
10.38(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated May 8, 2008, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea for Option No. 08-05
10.39(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated December 3, 2008, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea for Option No. 08-10
10.40(2)(4)	Radius Health, Inc. (f/k/a Nuvios, Inc.) 2003 Long-Term Incentive Plan Stock Option Agreement, dated December 16, 2003, by and between the Company, as successor to Nuvios, Inc., and Gary Hattersley for Option No. 03-001
10.41(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated February 15, 2006, by and between the Company, as successor to Radius Health, Inc., and Gary Hattersley for Option No. 06-02
10.42(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated July 12, 2007, by and between the Company, as successor to Radius Health, Inc., and Gary Hattersley for Option No. 07-06
10.43(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated May 8, 2008, by and between the Company, as successor to Radius Health, Inc., and Gary Hattersley for Option No. 08-08
10.44(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated December 3, 2008, by and between the Company, as successor to Radius Health, Inc., and Gary Hattersley for Option No. 08-13
10.45(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated July 12, 2007, by and between the Company, as successor to Radius Health, Inc., and Nick Harvey for Option No. 07-09
10.46(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated May 8, 2008, by and between the Company, as successor to Radius Health, Inc., and Nick Harvey for Option No. 08-06
10.47(2)(9)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated December 3, 2008, by and between the Company, as successor to Radius Health, Inc., and Nick Harvey for Option No. 08-11
10.48(2)	Employment Letter Agreement, dated July 2, 2004, by and between the Company, as successor to Nuvios, Inc., and C. Richard Edmund Lyttle
10.49(2)	Employment Letter Agreement, November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Gary Hattersley
10.50(2)	Employment Letter Agreement, dated January 30, 2006, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea

Table of Contents

Exhibit No.	Description
10.51(10)	Employment Letter Agreement, dated November 15, 2006, by and between the Company, as successor to Radius Health, Inc., and Nick Harvey
10.52(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Ansbert K. Gadicke
10.53(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and C. Richard Edmund Lyttle
10.54(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Martin Muenchbach
10.55(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Jonathan Fleming
10.56(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Kurt Graves
10.57(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Elizabeth Stoner
10.58(2)	Indemnification Agreement, dated October 12, 2010, by and between the Company, as successor to Radius Health, Inc., and Alan Auerbach
10.59(2)	Indemnification Agreement, dated November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Michael Rosenblatt, M.D.
10.60(2)	Indemnification Agreement, dated November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Christopher Mirabelli
10.61(2)	Indemnification Agreement, dated November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Augustine Lawlor
10.62(2)	Indemnification Agreement, dated November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Edward Mascioli, M.D.
10.63(10)	Consent to Sublease, dated January 14, 2011, by and among the Company, as successor to Radius Health, Inc., Sonos, Inc., and Broadway/Hampshire Associates Limited Partnership
10.64(10)	Sublease, dated January 14, 2011, by and between the Company, as successor to Radius Health, Inc., and Sonos, Inc.
10.65(2)	Amended and Restated Warrant to Purchase Common Stock, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and SVB Financial Group
10.66(2)	Warrant to Purchase Series A-1 Convertible Preferred Stock, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Leerink Swann LLC
10.67(5)	Amendment No. 1 to Series A-1 Convertible Preferred Stock Purchase Agreement, dated May 11, 2011
10.68(1)	Redemption Agreement, by and between MPM Acquisition Corp. and MPM Asset Management LLC, dated April 25, 2011
10.69(6)	Loan and Security Agreement, dated May 23, 2011, with General Electric Capital Corporation as agent and a lender, and Oxford Finance LLC as a lender
10.70(6)	Promissory Note, dated May 23, 2011, issued by the Company to General Electric Capital Corporation in the principal amount of $12,500,000

Table of Contents

Exhibit No.	Description
10.71(6)	Promissory Note, dated May 23, 2011, issued by the Company to Oxford Finance LLC in the principal amount of $3,125,000
10.72(6)	Promissory Note, dated May 23, 2011, issued by the Company to Oxford Finance LLC in the principal amount of $9,375,000
10.73(6)	Warrant to Purchase Shares of Series A-1 Convertible Preferred Stock, dated May 23, 2011, issued by the Company to GE Capital Equity Investments
10.74(6)	Warrant to Purchase Shares of Series A-1 Convertible Preferred Stock, dated May 23, 2011, issued by the Company to Oxford Finance LLC
10.75(8)	Lease by and between Broadway Hampshire Associates Limited Partnership and Radius Health, Inc. 201 Broadway Cambridge, Massachusetts, dated July 15, 2011
16.1	Letter from Raich Ende Malter & Co. LLP as to the change in certifying accountant, dated as of September 28, 2011
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
23.2	Consent of Bingham McCutchen (included in Exhibit 5.1)
24.1(5)	Power of Attorney
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

(1) Incorporated by reference to the Company's Current Report on Form 8-K filed on April 29, 2011.

(2) Incorporated by reference to the Company's Current Report on Form 8-K filed on May 23, 2011.

(3) Incorporated by reference to the Company's Registration Statement on Form 10 filed on April 16, 2008.

(4) Share numbers and per share prices are presented pre-Reverse Split completed by Radius Health, Inc. on May 17, 2011.

(5) Previously Filed.

(6) Incorporated by reference to the Company's Current Report on Form 8-K filed on May 27, 2011.

(7) Incorporated by reference to the Company's Periodic Report on Form 10-Q/A filed on September 30, 2011.

(8) Incorporated by reference to the Company's Current Report on Form 8-K filed on September 30, 2011.

(9) Confidential Treatment Requested by the Registrant. Redacted Portion Filed Separately with the Commission.

(10) Incorporated by reference to the Company's Current Report on Form 8-K filed on September 30, 2011.

(11) Incorporated by reference to the Company's Current Report on Form 8-K filed on September 30, 2011.

Table of Contents

(b) *Financial Statement Schedules.*

None.

Undertakings

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) (§ 230.424(b) of this chapter) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424 (§ 230.424 of this chapter);

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, The Commonwealth of Massachusetts on this 6th day of October 2011.

RADIUS HEALTH, INC.

By: /s/ C. RICHARD EDMUND LYTTLE

C. Richard Edmund Lyttle
President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, this statement has been signed by the following persons in the capacities indicated as of the 6th day of October 2011.

Signature	Title
/s/ C. RICHARD EDMUND LYTTLE C. Richard Edmund Lyttle	President and Chief Executive Officer; Director (Principal Executive Officer)
/s/ B. NICHOLAS HARVEY B. Nicholas Harvey	Chief Financial Officer (Principal Accounting and Financial Officer)
* Alan Auerbach	Director
* Jonathan Fleming	Director
* Ansbert K. Gadicke	Director
* Kurt Graves	Director
* Martin Muenchbach	Director
* Elizabeth Stoner	Director

/s/ C. RICHARD EDMUND LYTTLE

Attorney-in-fact

Table of Contents

EXHIBIT INDEX

Exhibit No.	Description
2.1(11)	Agreement and Plan of Merger, dated April 25, 2011
3.1	Certificate of Incorporation, as amended
3.2(10)	By-Laws, as amended
4.1(2)	Amended and Restated Stockholders' Agreement, dated May 17, 2011, by and among the Company, as successor to Radius Health, Inc., and the Stockholders listed therein
4.2	Certificate of Designations of the Company filed herewith as Exhibit 3.1 hereof
5.1	Opinion of Bingham McCutchen LLP
10.1(9)(10)	Clinical Trial Services Agreement and Work Statement NB-1, dated March 29, 2011, by and between the Company, as successor to Radius Health, Inc., and Nordic BioScience Clinical Development VII A/S
10.2(7)(9)	Amended and Restated Stock Issuance Agreement, dated May 16, 2011, by and between the Company, as successor to Radius Health, Inc., and Nordic BioScience Clinical Development VII A/S
10.3(2)(9)	Side Letter, dated March 29, 2011, by and between the Company, as successor to Radius Health, Inc., and Nordic BioScience Clinical Development VII A/S
10.4(9)(10)	License Agreement, dated September 27, 2005, by and between the Company, as successor to Nuvios, Inc., and SCRAS SAS, on behalf of itself and its Affiliates
10.5(9)(10)	Pharmaceutical Development Agreement, dated January 2, 2006, by and between the Company, as successor to Radius Health, Inc., and Beaufour Ipsen Industrie SAS
10.6(9)(10)	Amendment No. 1 to Pharmaceutical Development Agreement, dated January 1, 2007, by and between the Company, as successor to Radius Health, Inc., and Beaufour Ipsen Industrie SAS
10.7(2)(9)	License Agreement Amendment No. 1, dated September 12, 2007, by and between the Company, as successor to Radius Health, Inc., and SCRAS SAS
10.8(2)(9)	Amendment No. 2 to Pharmaceutical Development Agreement, dated January 1, 2009, by and between the Company, as successor to Radius Health, Inc., and Beaufour Ipsen Industrie SAS
10.9(9)(10)	Amendment No. 3 to Pharmaceutical Development Agreement, dated June 16, 2010, by and between the Company, as successor to Radius Health, Inc., and Beaufour Ipsen Industrie SAS
10.10(9)(10)	License Agreement Amendment No. 2, dated May 11, 2011, by and between the Company, as successor to Radius Health, Inc., and Ipsen Pharma SAS
10.11(9)(10)	Series A-1 Convertible Preferred Stock Issuance Agreement, dated May 11, 2011, by and between the Company, as successor to Radius Health, Inc., and Ipsen Pharma SAS
10.12(9)(10)	Development and Manufacturing Services Agreement, dated October 16, 2007, by and between the Company, as successor to Radius Health, Inc., and LONZA Sales Ltd.
10.13(9)(10)	Work Order No. 2, dated January 15, 2010, by and between the Company, as successor to Radius Health, Inc., and LONZA Sales Ltd.

Table of Contents

Exhibit No.	Description
10.14(2)(9)	Amendment No. 3 to Work Order No.2, dated December 15, 2010, by and between the Company, as successor to Radius Health, Inc., and LONZA Sales Ltd.
10.15(2)(9)	Development and Clinical Supplies Agreement, dated June 19, 2009, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.16(2)(9)	Amendment No. 1, dated December 31, 2009, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.17(2)(9)	Amendment No. 2, dated September 16, 2010, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.18(2)(9)	Amendment No. 3, dated September 29, 2010, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.19(9)(10)	Change Order Form Amendment No. 5, dated February 4, 2011, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.20(2)(9)	Amendment No. 4, dated March 2, 2011, to the 3M Development Agreement, by and among the Company, as successor to Radius Health, Inc., and 3M Co. and 3M Innovative Properties Co.
10.21(2)(9)	Laboratory Services and Confidentiality Agreement, dated March 31, 2004, by and between the Company, as successor to Nuvios, Inc., and Charles River Laboratories, Inc.
10.22(9)(10)	First Amendment to Laboratory Services and Confidentiality Agreement, dated November 7, 2008, by and between the Company, as successor to Radius Health, Inc., and Charles River Laboratories, Inc.
10.23(2)(9)	Letter of Payment Authorization, dated November 20, 2010, by and between the Company, as successor to Radius Health, Inc., and Charles River Laboratories Preclinical Services Montréal Inc.
10.24(9)(10)	Letter of Payment Authorization, dated February 7, 2011, by and between the Company, as successor to Radius Health, Inc., and Charles River Laboratories Preclinical Services Montréal Inc.
10.25(9)(10)	License Agreement, dated June 29, 2006, by and between the Company, as successor to Radius Health, Inc., and Eisai Co., Ltd.
10.26(10)	Series A-1 Convertible Preferred Stock Purchase Agreement, dated April 25, 2011, by and among the Company, as successor to Radius Health, Inc., and the Investors listed therein
10.27(2)(4)	Radius Health, Inc. (f/k/a Nuvios, Inc.) 2003 Long-Term Incentive Plan, assumed in the Merger
10.28(2)(4)	Radius Health, Inc. First Amendment to 2003 Long-Term Incentive Plan effective as of December 15, 2006, assumed in the Merger
10.29(2)(4)	Radius Health, Inc. Second Amendment to 2003 Long-Term Incentive Plan effective as of March 28, 2008, assumed in the Merger

Table of Contents

Exhibit No.	Description
10.30(2)(4)	Radius Health, Inc. Third Amendment to 2003 Long-Term Incentive Plan effective as of November 14, 2008, assumed in the Merger
10.31(2)	Radius Health, Inc. 2003 Long-Term Incentive Plan Form of Stock Option Agreement
10.32(2)(4)	Radius Health, Inc. (f/k/a Nuvios, Inc.) 2003 Long-Term Incentive Plan Stock Option Agreement, dated October 28, 2004, by and between the Company, as successor to Nuvios, Inc., and Richard Lyttle for Option No. 04-103
10.33(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated July 12, 2007, by and between the Company, as successor to Radius Health, Inc., and Richard Lyttle for Option No. 07-08
10.34(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated May 8, 2008, by and between the Company, as successor to Radius Health, Inc., and Richard Lyttle for Option No. 08-09
10.35(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated December 3, 2008, by and between the Company, as successor to Radius Health, Inc., and Richard Lyttle for Option No. 08-14
10.36(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated February 15, 2006, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea for Option No. 06-07
10.37(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated July 12, 2007, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea for Option No. 07-07
10.38(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated May 8, 2008, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea for Option No. 08-05
10.39(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated December 3, 2008, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea for Option No. 08-10
10.40(2)(4)	Radius Health, Inc. (f/k/a Nuvios, Inc.) 2003 Long-Term Incentive Plan Stock Option Agreement, dated December 16, 2003, by and between the Company, as successor to Nuvios, Inc., and Gary Hattersley for Option No. 03-001
10.41(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated February 15, 2006, by and between the Company, as successor to Radius Health, Inc., and Gary Hattersley for Option No. 06-02
10.42(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated July 12, 2007, by and between the Company, as successor to Radius Health, Inc., and Gary Hattersley for Option No. 07-06
10.43(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated May 8, 2008, by and between the Company, as successor to Radius Health, Inc., and Gary Hattersley for Option No. 08-08
10.44(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated December 3, 2008, by and between the Company, as successor to Radius Health, Inc., and Gary Hattersley for Option No. 08-13

Table of Contents

Exhibit No.	Description
10.45(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated July 12, 2007, by and between the Company, as successor to Radius Health, Inc., and Nick Harvey for Option No. 07-09
10.46(2)(4)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated May 8, 2008, by and between the Company, as successor to Radius Health, Inc., and Nick Harvey for Option No. 08-06
10.47(2)(9)	Radius Health, Inc. 2003 Long-Term Incentive Plan Incentive Stock Option Agreement, dated December 3, 2008, by and between the Company, as successor to Radius Health, Inc., and Nick Harvey for Option No. 08-11
10.48(2)	Employment Letter Agreement, dated July 2, 2004, by and between the Company, as successor to Nuvios, Inc., and C. Richard Edmund Lyttle
10.49(2)	Employment Letter Agreement, November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Gary Hattersley
10.50(2)	Employment Letter Agreement, dated January 30, 2006, by and between the Company, as successor to Radius Health, Inc., and Louis O'Dea
10.51(10)	Employment Letter Agreement, dated November 15, 2006, by and between the Company, as successor to Radius Health, Inc., and Nick Harvey
10.52(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Ansbert K. Gadicke
10.53(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and C. Richard Edmund Lyttle
10.54(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Martin Muenchbach
10.55(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Jonathan Fleming
10.56(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Kurt Graves
10.57(2)	Indemnification Agreement, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Elizabeth Stoner
10.58(2)	Indemnification Agreement, dated October 12, 2010, by and between the Company, as successor to Radius Health, Inc., and Alan Auerbach
10.59(2)	Indemnification Agreement, dated November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Michael Rosenblatt, M.D.
10.60(2)	Indemnification Agreement, dated November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Christopher Mirabelli
10.61(2)	Indemnification Agreement, dated November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Augustine Lawlor
10.62(2)	Indemnification Agreement, dated November 14, 2003, by and between the Company, as successor to Nuvios, Inc., and Edward Mascioli, M.D.
10.63(10)	Consent to Sublease, dated January 14, 2011, by and among the Company, as successor to Radius Health, Inc., Sonos, Inc., and Broadway/Hampshire Associates Limited Partnership

Table of Contents

Exhibit No.	Description
10.64(10)	Sublease, dated January 14, 2011, by and between the Company, as successor to Radius Health, Inc., and Sonos, Inc.
10.65(2)	Amended and Restated Warrant to Purchase Common Stock, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and SVB Financial Group
10.66(2)	Warrant to Purchase Series A-1 Convertible Preferred Stock, dated May 17, 2011, by and between the Company, as successor to Radius Health, Inc., and Leerink Swann LLC
10.67(5)	Amendment No. 1 to Series A-1 Convertible Preferred Stock Purchase Agreement, dated May 11, 2011
10.68(1)	Redemption Agreement, by and between MPM Acquisition Corp. and MPM Asset Management LLC, dated April 25, 2011
10.69(6)	Loan and Security Agreement, dated May 23, 2011, with General Electric Capital Corporation as agent and a lender, and Oxford Finance LLC as a lender
10.70(6)	Promissory Note, dated May 23, 2011, issued by the Company to General Electric Capital Corporation in the principal amount of $12,500,000
10.71(6)	Promissory Note, dated May 23, 2011, issued by the Company to Oxford Finance LLC in the principal amount of $3,125,000
10.72(6)	Promissory Note, dated May 23, 2011, issued by the Company to Oxford Finance LLC in the principal amount of $9,375,000
10.73(6)	Warrant to Purchase Shares of Series A-1 Convertible Preferred Stock, dated May 23, 2011, issued by the Company to GE Capital Equity Investments
10.74(6)	Warrant to Purchase Shares of Series A-1 Convertible Preferred Stock, dated May 23, 2011, issued by the Company to Oxford Finance LLC
10.75(8)	Lease by and between Broadway Hampshire Associates Limited Partnership and Radius Health, Inc. 201 Broadway Cambridge, Massachusetts, dated July 15, 2011
16.1	Letter from Raich Ende Malter & Co. LLP as to the change in certifying accountant, dated as of September 28, 2011
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
23.2	Consent of Bingham McCutchen (included in Exhibit 5.1)
24.1(5)	Power of Attorney
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

(1) Incorporated by reference to the Company's Current Report on Form 8-K filed on April 29, 2011.

(2) Incorporated by reference to the Company's Current Report on Form 8-K filed on May 23, 2011.

Table of Contents

(3) Incorporated by reference to the Company's Registration Statement on Form 10 filed on April 16, 2008.

(4) Share numbers and per share prices are presented pre-Reverse Split completed by Radius Health, Inc. on May 17, 2011.

(5) Previously Filed.

(6) Incorporated by reference to the Company's Current Report on Form 8-K filed on May 27, 2011.

(7) Incorporated by reference to the Company's Periodic Report on Form 10-Q/A filed on September 30, 2011.

(8) Incorporated by reference to the Company's Current Report on Form 8-K filed on September 30, 2011.

(9) Confidential Treatment Requested by the Registrant. Redacted Portion Filed Separately with the Commission.

(10) Incorporated by reference to the Company's Current Report on Form 8-K filed on September 30, 2011.

(11) Incorporated by reference to the Company's Current Report on Form 8-K filed on September 30, 2011.