URSTADT BIDDLE PROPERTIES INC
Form 10-Q
March 10, 2016
United States
Securities And Exchange Commission
Washington, DC 20549

Form 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended January 31, 2016

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____to_____

Commission File Number 1-12803

Urstadt Biddle Properties Inc.
(Exact Name of Registrant in its Charter)

Maryland	04-2458042
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
321 Railroad Avenue, Greenwich, CT	06830
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (203) 863-8200

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller reporting company

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes No

As of March 4, 2016 (latest date practicable), the number of shares of the Registrant's classes of Common Stock and Class A Common Stock outstanding was: 9,504,378 Common Shares, par value $.01 per share, and 26,465,544 Class A Common Shares, par value $.01 per share.

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Urstadt Biddle Properties Inc.

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URSTADT BIDDLE PROPERTIES INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except share data)

ASSETS	January 31, 2016 (Unaudited)	October 31, 2015
Real Estate Investments:		
Real Estate– at cost	$ 945,665	$ 941,690
Less: Accumulated depreciation	(170,583)	(165,660)
	775,082	776,030
Investments in and advances to unconsolidated joint ventures	38,974	39,305
	814,056	815,335
Cash and cash equivalents	3,173	6,623
Restricted cash	2,322	2,191
Tenant receivables	22,838	22,353
Prepaid expenses and other assets	13,984	9,334
Deferred charges, net of accumulated amortization	6,410	5,239
Total Assets	$ 862,783	$ 861,075
LIABILITIES AND STOCKHOLDERS' EQUITY		
Liabilities:		
Revolving credit line	$ 29,750	$ 22,750
Mortgage notes payable and other loans	259,000	260,457
Accounts payable and accrued expenses	6,672	3,438
Deferred compensation – officers	110	155
Other liabilities	15,991	17,542
Total Liabilities	311,523	304,342
Redeemable Noncontrolling Interests	16,881	15,955
Commitments and Contingencies		
Stockholders' Equity:		
7.125% Series F Cumulative Preferred Stock (liquidation preference of $25 per share); 5,175,000 shares issued and outstanding	129,375	129,375
6.75% Series G Cumulative Preferred Stock (liquidation preference of $25 per share); 3,000,000 shares issued and outstanding	75,000	75,000
Excess Stock, par value $0.01 per share; 20,000,000 shares authorized; none issued and outstanding	-	-
Common Stock, par value $0.01 per share; 30,000,000 shares authorized; 9,504,378 and 9,350,885 shares issued and outstanding	96	94
Class A Common Stock, par value $0.01 per share; 100,000,000 shares authorized; 26,465,544 and 26,370,216 shares issued and outstanding	265	264
Additional paid in capital	432,583	431,411
Cumulative distributions in excess of net income	(101,251)	(94,136)
Accumulated other comprehensive (loss)	(1,689)	(1,230)

Total Stockholders' Equity	534,379	540,778
Total Liabilities and Stockholders' Equity	$ 862,783	$ 861,075

The accompanying notes to consolidated financial statements are an integral part of these statements.

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URSTADT BIDDLE PROPERTIES INC.
CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)
(In thousands, except per share data)

	Three Months Ended January 31,	
	2016	2015
Revenues		
Base rents	$20,072	$21,011
Recoveries from tenants	6,372	7,146
Lease termination income	42	44
Other income	965	305
Total Revenues	27,451	28,506
Expenses		
Property operating	4,767	5,086
Property taxes	4,623	4,462
Depreciation and amortization	5,688	5,526
General and administrative	2,462	2,268
Provision for tenant credit losses	239	343
Acquisition costs	80	1,768
Directors' fees and expenses	83	114
Total Operating Expenses	17,942	19,567
Operating Income	9,509	8,939
Non-Operating Income (Expense):		
Interest expense	(3,271)	(3,264)
Equity in net income from unconsolidated joint ventures	383	474
Interest, dividends and other investment income	51	15
Net Income	6,672	6,164
Noncontrolling interests:		
Net income attributable to noncontrolling interests	(225)	(153)
Net income attributable to Urstadt Biddle Properties Inc.	6,447	6,011
Preferred stock dividends	(3,570)	(3,894)
Net Income Applicable to Common and Class A Common Stockholders	$2,877	$2,117
Basic Earnings Per Share:		
Per Common Share:	$0.08	$0.06
Per Class A Common Share:	$0.09	$0.06
Diluted Earnings Per Share:		
Per Common Share:	$0.08	$0.06
Per Class A Common Share:	$0.08	$0.06
Dividends Per Share:		

Common	$0.2300	$0.2250
Class A Common	$0.2600	$0.2550

The accompanying notes to consolidated financial statements are an integral part of these statements.

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URSTADT BIDDLE PROPERTIES INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)
(In thousands)

	Three Months Ended January 31,	
	2016	2015
Net Income	$6,672	$6,164
Other comprehensive (loss):		
Change in unrealized loss on interest rate swaps	(459)	(1,714)
Total comprehensive income	6,213	4,450
Comprehensive income attributable to noncontrolling interests	(225)	(153)
Total Comprehensive income attributable to Urstadt Biddle Properties Inc.	5,988	4,297
Preferred stock dividends	(3,570)	(3,894)
Total comprehensive income applicable to Common and Class A Common Stockholders	$2,418	$403

The accompanying notes to consolidated financial statements are an integral part of these statements.

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URSTADT BIDDLE PROPERTIES INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)
(In thousands)

	Three Months Ended January 31,	
	2016	2015
Cash Flows from Operating Activities:		
Net income	$6,672	$6,164
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	5,688	5,526
Straight-line rent adjustment	(211)	359
Provision for tenant credit losses	239	343
Restricted stock compensation expense and other adjustments	1,117	1,074
Deferred compensation arrangement	(45)	(17)
Equity in net (income) of unconsolidated joint ventures	(383)	(474)
Changes in operating assets and liabilities:		
Tenant receivables	(514)	(3,799)
Accounts payable and accrued expenses	2,776	2,910
Other assets and other liabilities, net	(6,312)	(4,554)
Restricted Cash	(131)	(91)
Net Cash Flow Provided by Operating Activities	8,896	7,441
Cash Flows from Investing Activities:		
Acquisitions of real estate investments	-	(122,441)
Investments in and advances to unconsolidated joint ventures	-	(17)
Deposits on acquisition of real estate investment	(479)	-
Return of deposits on acquisition of real estate investments	640	627
Improvements to properties and deferred charges	(5,927)	(4,062)
Distributions to noncontrolling interests	(225)	(1,195)
Distributions from unconsolidated joint ventures	681	397
Net Cash Flow (Used in) Investing Activities	(5,310)	(126,691)
Cash Flows from Financing Activities:		
Dividends paid -- Common and Class A Common Stock	(9,066)	(8,881)
Dividends paid -- Preferred Stock	(3,570)	(3,894)
Principal repayments on mortgage notes payable	(1,457)	(3,986)
Proceeds from mortgage financings	-	67,680
Redemption of preferred stock	-	(61,250)
Repayment of revolving credit line borrowings	(3,000)	(77,550)
Proceeds from revolving credit line borrowings	10,000	74,500
Net proceeds from the issuance of preferred stock	-	4,650
Sales of additional shares of Common and Class A Common Stock	57	59,846
Net Cash Flow Provided by (Used In) Financing Activities	(7,036)	51,115
Net (Decrease) In Cash and Cash Equivalents	(3,450)	(68,135)
Cash and Cash Equivalents at Beginning of Period	6,623	73,029
Cash and Cash Equivalents at End of Period	$3,173	$4,894

Supplemental Cash Flow Disclosures:		
Interest Paid	$3,253	$3,221

The accompanying notes to consolidated financial statements are an integral part of these statements.

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URSTADT BIDDLE PROPERTIES INC.
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY (UNAUDITED)
(In thousands, except shares and per share data)

	7.125% Series F Preferred Stock Issued	7.125% Series F Preferred Stock Amount	6.75% Series G Preferred Stock Issued	6.75% Series G Preferred Stock Amount	Common Stock Issued	Common Stock Amount	Class A Common Stock Issued
Balances - October 31, 2015	5,175,000	$129,375	3,000,000	$75,000	9,350,885	$94	

We currently intend to use the net proceeds from this off
continue to discover and develop other protein therapeutics in
including funding the costs of operating a public company. Se
purposes, general and administrative expenses, capital expend
property. Although we currently intend to use the net proceed
application of the net proceeds. Our failure to apply these fun
protein therapeutic candidates.

***We are incurring significant increased costs as a result of o
substantial time to new compliance initiatives.***

As a newly public company, we are incurring significant
addition, the Sarbanes-Oxley Act, and rules of the SEC and th
requirements on public companies including requiring establi
management and other personnel will need to devote a substa
regulations have increased and will continue to increase our le
time-consuming and costly.

The Sarbanes-Oxley Act requires, among other things, th
controls and procedures. In particular, we must perform syste
to allow management to report on the effectiveness of our int

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Section 404 of the Sarbanes-Oxley Act, beginning with our a
we will be required to have our independent registered public
reporting beginning with our annual report on Form 10-K foll
compliance with Section 404 of the Sarbanes-Oxley Act will
management efforts. We currently do not have an internal aud
appropriate public company experience and technical account
in a timely manner, or if we or our independent registered pub
reporting that are deemed to be material weaknesses, the mark
investigations by NASDAQ, the SEC or other regulatory auth

Our ability to successfully implement our business plan
financial statements. We expect that we will need to continue
procedures and controls to manage our business effectively. A
enhanced systems, procedures or controls, may cause our ope
financial reporting is effective and to obtain an unqualified re
Sarbanes-Oxley Act. This, in turn, could have an adverse imp
access the capital markets.

We do not expect to pay any cash dividends for the foreseea

You should not rely on an investment in our common sto
dividends to holders of our common stock in the foreseeable f
operations. In addition, our ability to pay cash dividends is cu
debt financing arrangement may contain terms prohibiting or
stock. Accordingly, investors must rely on sales of their comm
realize any return on their investment. As a result, investors s

***Provisions in our restated certificate of incorporation, our a
that could discourage an acquisition of us by others, even if
by our stockholders to replace or remove our current manag***

Our restated certificate of incorporation, amended and re
delaying or preventing a change in control of us or changes in
provisions that:

- authorize "blank check" preferred stock, w
  may contain voting, liquidation, dividend
- create a classified board of directors whos
- specify that special meetings of our stock
- prohibit stockholder action by written con

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establish an advance notice procedure for
including proposed nominations of perso

provide that our directors may be remove

provide that vacancies on our board of di
than a quorum;

specify that no stockholder is permitted t

expressly authorize our board of director

require supermajority votes of the holder
incorporation and amended and restated b

These provisions, alone or together, could delay or preve

In addition, because we are incorporated in the state of D
Corporation Law, which limits the ability of stockholders ow

Any provision of our restated certificate of incorporation
deterring a change in control could limit the opportunity for o
could also affect the price that some investors are willing to p

***Our restated certificate of incorporation designates the Cou
Delaware as the exclusive forum for certain types of actions
stockholders' ability to obtain a favorable judicial forum for***

Our restated certificate of incorporation provides that, su
federal court within the State of Delaware will be exclusive fo
action asserting a claim of breach of a fiduciary duty owed by
action asserting a claim against us arising pursuant to any pro
incorporation or our amended and restated by-laws, or (4) any
doctrine. Any person or entity purchasing or otherwise acquir
to have consented to the provisions of our restated certificate
stockholder's ability to bring a claim in a judicial forum that i
which may discourage such lawsuits against us and our direct
our restated certificate of incorporation inapplicable to, or une
proceedings, we may incur additional costs associated with re
business and financial condition.

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Cautionary Note

This prospectus contains forward-looking statements. Fo
performance. Instead, they are based on our current beliefs, e
strategies, our clinical results and other future conditions. The
"may", "plan", "predict", "project", "target", "potential", "will
terms or other similar expressions are intended to identify for
identifying words.

The forward-looking statements in this prospectus includ

- the timing of results of our ongoing clinic
- our plans to develop and commercialize d commercialize sotatercept and ACE-536;
- the potential benefits of strategic partners arrangements;
- the timing of, and our and Celgene's abili candidates;
- the rate and degree of market acceptance
- our ability to quickly and efficiently ident
- our commercialization, marketing and ma
- our intellectual property position; and
- our estimates regarding expenses, future r resources and our need for additional fina

We may not actually achieve the plans, intentions or exp
undue reliance on our forward-looking statements. Actual res
disclosed in the forward-looking statements we make. We ha
prospectus, particularly in the "Risk Factors" section, that we
forward-looking statements that we make. Our forward-looki
dispositions, joint ventures or investments we may make.

The forward-looking statements in this prospectus repres
and developments will cause our views to change. However,
future, we have no current intention of doing so except to the
forward-looking statements as representing our views as of a

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The net proceeds of the sale of 2,035,000 shares of comm
offering price of $49.14 per share (the last reported price of o
deducting underwriting discounts and commissions and estim
purchase additional shares of common stock in full, we estim
underwriting discounts and commissions and estimated offeri
offering price of $49.14 per share (the last reported price of o
increase or decrease our net proceeds by approximately $1.9 m
this prospectus, remains the same and after deducting the und
us.

We intend to use the net proceeds from this offering as f

- approximately $57.0 million to continue c
of dalantercept in combination with either
and obtaining the supply of dalantercept f

- approximately $8.0 million to conduct cli
ACE-083;

- approximately $15.0 million to continue t
candidates; and

- use the remainder for general and adminis
programs, early-stage research and develo
purposes.

The expected use of the net proceeds from this offering r
which could change in the future as our plans and business co
numerous factors, including the ongoing status of and results
development efforts and any unforeseen cash needs. As a resu
offering. Although we may use a portion of the net proceeds c
candidates, technologies, compounds, other assets or complem
to do so.

Pending the use of the proceeds from this offering, we in
securities, certificates of deposit or government securities.

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MARKET PI

Our common stock has been listed on The NASDAQ Gl
there was no public market for our common stock. The follow
of our common stock as reported on The NASDAQ Global M

Year ended December 31, 2013:	**High**
Third quarter(1)	$ 23
Fourth quarter	$ 40
Year ending December 31, 2014:	
First quarter (through January 17, 2014)	$ 50

(1) Represents the period from September 19, 2013, the
Market after the pricing of our initial public offerin

A recent reported closing price for our common stock is
transfer agent and registrar for our common stock. As of Janu

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We have never declared or paid cash dividends on our co
earnings, if any, to fund the development and expansion of ou
future. In addition, our ability to pay cash dividends is curren
financing arrangement may contain terms prohibiting or limit
Any future determination to pay dividends will be made at the

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The following table sets forth our cash and cash equivale

on an actual basis;

on an as adjusted basis to reflect the sale
price of $49.14 per share (the last reporte
2014), after deducting underwriting disco

You should read this information together with our audit
the information set forth under the heading "Selected Financia
Results of Operations".

Cash and cash equivalents	
Notes payable, net of current portion	
Warrants to purchase common stock	
Stockholders' equity:	
Undesignated preferred stock, $0.001 par value: 25,000,000 s outstanding	
Common stock, $0.001 par value; 175,000,000 shares authori issued and outstanding, actual, and 30,104,579 shares issued a	
Additional paid-in capital	
Accumulated deficit	
Total stockholders' equity	
Total capitalization	

(1)

A $1.00 increase (decrease) in the assumed public o
The NASDAQ Global Market on January 17, 2014
equivalents and total stockholders' equity by approx
on the cover of this prospectus, remains the same a
expenses payable by us.

(2)

The actual and as adjusted information set forth in t
stock options outstanding as of September 30, 2013
common stock issuable upon the exercise of warran
weighted-average exercise price of $6.56 per share,
Equity Incentive Plan as of September 30, 2013, an
Employee Stock Purchase Plan as of September 30,

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SELE

The information set forth below should be read in conjur
Results of Operations" section of this prospectus and with our
selected financial data in this section are not intended to repla
statements and related notes included elsewhere in this prospe

The selected statements of operations and comprehensiv
balance sheet data as of December 31, 2011 and 2012 have be
prospectus. The selected statements of operations and compre
and the balance sheet data as of September 30, 2013 have bee
prospectus. In our opinion, these unaudited financial statemer
and contain all adjustments, consisting only of normal and rec
historical results for any prior period are not necessarily indic
are not necessarily indicative of results to be expected for a fu

(in thousands, except per share data)
Revenue:
Collaboration revenue:
License and milestone
Cost-sharing, net
Contract manufacturing
Total revenue
Costs and expenses:
Research and development
General and administrative
Cost of contract manufacturing revenue
Total costs and expenses
Income (loss) from operations
Total other expense, net
Net income (loss)
Comprehensive income (loss)
Net income (loss) per share applicable to common stockholde
Basic
Diluted
Weighted-average number of common shares used in comput
per share applicable to common stockholders
Basic
Diluted

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(in thousands)	
Balance Sheet Data:	
Cash and cash equivalents	
Total assets	
Total current liabilities	
Long term deferred revenue	
Long-term notes payable	
Warrants to purchase redeemable convertible preferred stock	
Warrants to purchase common stock	
Redeemable convertible preferred stock	
Total stockholder's (deficit) equity	

(1) See Note 2 within the notes to our financial stateme
calculate basic and diluted net income (loss) per co

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**MANAGEMENT
FINANCIAL CONDI**

*You should read the following discussion and analysis o
"Selected Financial Data" and our financial statements and r
of this prospectus contain forward-looking statements that in
expectations and intentions. Our actual results could differ m
could cause or contribute to such differences include, but are*

We are a clinical stage biopharmaceutical company focu
therapeutics for cancer and rare diseases. Our research focuse
superfamily, a large and diverse group of molecules that are k
are leaders in understanding the biology of the TGF-β superfa
coupling our discovery and development expertise, including
engineering and manufacturing capabilities, we have built a h
protein therapeutic candidates with novel mechanisms of acti
significantly improve clinical outcomes for patients with canc

We have three internally discovered protein therapeutic
trials, focused on cancer and rare diseases. Our two most adva
cell production through a novel mechanism. Together with ou
developing sotatercept and ACE-536 to treat anemia and asso
(MDS), red blood cell disorders that are generally unresponsi
candidate, dalantercept, is designed to inhibit blood vessel for
the dominant class of cancer drugs that inhibit blood vessel fo
developing dalantercept primarily for use in combination with

We are developing sotatercept and ACE-536 through ou
became responsible for paying 100% of worldwide developm
development, regulatory and commercial milestone payments
we will receive a royalty on net sales in the low-to-mid 20% r
approved, for which our commercialization costs will be entir
retain worldwide rights to this program.

As of September 30, 2013, our operations have been prir
$86.8 million in net proceeds from our initial public offering,
payments, milestones, and net research and development payr

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We expect to continue to incur significant expenses and
expenses will increase substantially in connection with our or

- conduct clinical trials for dalantercept;
- continue our preclinical studies and poten candidates;
- continue research activities for the discov
- manufacture protein therapeutics for our
- seek regulatory approval for our protein t
- operate as a public company.

We will not generate revenue from product sales unless
approval for one or more of our protein therapeutic candidate
uncertainty. All current and future development and commerc
regulatory approval for dalantercept or any future protein ther
related to product sales, marketing, manufacturing and distrib
fund our operations through the sale of equity, debt financing
be unable to raise additional funds or enter into such other arr
enter into such other arrangements as, and when, needed, we
commercialization of one or more of our protein therapeutics.

Our ability to generate product revenue and become prof
products. We expect to incur losses for the foreseeable future
seek regulatory approvals for, our protein therapeutics and po
numerous risks and uncertainties associated with product dev

Fina

Revenue

Collaboration Revenue

We have not generated any revenue from the sale of pro
revenue, which includes license and milestone revenues and c
partners for the development and commercialization of our pr
collaboration partners for expenses incurred by us for researc
collaboration agreements. Cost sharing revenue is recognized
reimburse collaborators for costs incurred in connection with
revenue.

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Contract Manufacturing Revenue

We have generated contract manufacturing revenue in th
manufacturing revenue consists of revenue received for produ

Costs and Expenses

Research and Development Expenses

Research and development expenses consist primarily of
candidates, which include:

- direct employee-related expenses, includi
and development personnel;
- expenses incurred under agreements with
our clinical trials;
- the cost of acquiring and manufacturing p
- allocated facilities, depreciation, and othe
supplies;
- expenses associated with obtaining and m
- costs associated with preclinical activities

Research and development costs are expensed as incurre
the progress to completion of specific tasks using information

We cannot determine with certainty the duration and cor
candidates or if, when, or to what extent we will generate reve
candidates for which we or any partner obtain regulatory appr
any of our protein therapeutic candidates. The duration, costs
will depend on a variety of factors, including:

- the scope, rate of progress, and expense o
development activities;
- future clinical trial results;
- potential changes in government regulatio
- the timing and receipt of any regulatory a

A change in the outcome of any of these variables with r
significant change in the costs and timing associated with the
another regulatory authority were to require us to conduct cli
completion of the clinical development of protein therapeutic
could be required to expend significant additional financial re

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From inception through September 30, 2013, we have in
our research and development expenses for the foreseeable fu
the discovery and development of preclinical protein therapeu
dalantercept. Beginning January 1, 2013, expenses associated
reimbursements are recorded as revenue. Of the Phase 2 clini
expensing the costs of six clinical trials of ACE-536 and dala

We manage certain activities such as clinical trial operat
toxicology studies through third-party CROs. The only costs
provided to us by CROs, manufacturing of preclinical and cli
do not assign or allocate to individual development programs
of preclinical research and studies. Our external research and
which development was suspended in April 2013) during the
2012 and 2013 are as follows:

(in thousands)	**20**
Sotatercept(1)	$
ACE-536(1)	
Dalantercept	
ACE-031(2)	
Total direct research and development expenses	
Other expenses(3)	2
Total research and development expenses	$ 3

(1) Beginning January 1, 2013, expenses associated wi
reimbursements are recorded as revenue and are pre

(2) In April 2013, we and Shire AG, which we refer to
terminated our collaboration agreement, effective a

(3) Other expenses include unallocated employee and c

Contract Manufacturing Expenses

Contract manufacturing expenses consist primarily of co
partners. The costs generally include employee-related expen
depreciation, utilities, facility maintenance and insurance. We

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General and Administrative Expenses

General and administrative expenses consist primarily of
travel expenses for our employees in executive, operational, f
including directors' fees and professional fees for accounting

Since the completion of our initial public offering in Sep
regulatory and tax-related services associated with maintainin
requirements, director and officer insurance premiums, and in
our general and administrative expenses will increase in the fu
development and potential commercialization of our protein t
therapeutic candidate appears likely, to the extent that we are
anticipate an increase in payroll and related expenses as a resu

Other Expense, Net

Other expense, net consists primarily of interest expense
and the re-measurement gain or loss associated with the chang

We use the Black-Scholes option pricing model to estim
pricing model, in part, on subjective assumptions, including s
preferred stock or common stock underlying the warrants.

Critical Accounting Poli

Our management's discussion and analysis of our financi
have been prepared in accordance with U.S. generally accepte
make estimates and judgments that affect the reported amoun
liabilities in our financial statements. On an ongoing basis, we
recognition, accrued expenses and stock-based compensation
of our common stock and the fair value of our liability-classif
on historical experience, known trends and events, and variou
results of which form the basis for making judgments about th
sources. Actual results may differ from these estimates under

While our significant accounting policies are described i
prospectus, we believe the following accounting policies to be
financial statements.

Revenue Recognition

We have primarily generated revenue through collaborat
of our protein therapeutics.

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We recognize revenue in accordance with Accounting St
revenue is recognized for each unit of accounting when all of
(2) delivery has occurred or services have been rendered; (3)

Amounts received prior to satisfying the revenue recogn
expected to be recognized as revenue within the 12 months fo
and amounts not expected to be recognized as revenue within
net of current portion.

Under collaboration agreements, we may receive payme
development events, research and development reimbursemer
with the deliverables contained in the arrangements which ma
and development activities performed for the collaboration pa
preclinical material.

Effective January 1, 2011, we adopted Accounting Stand
which amends ASC Topic 605-25, *Revenue Recognition Mu*
existing agreements that are significantly modified after Janua

The application of the multiple element guidance require
individual deliverables, and whether such deliverables are sep
considered separate units of accounting provided that: (1) the
arrangement includes a general right of return relative to the d
probable and substantially in our control. In determining the u
deliverables have stand-alone value, based on the considerati
research, manufacturing and commercialization capabilities o
general marketplace. In addition, we consider whether the col
without the receipt of the remaining element(s), whether the v
are other vendors that can provide the undelivered element(s)

Arrangement consideration that is fixed or determinable
method, and the applicable revenue recognition criteria, as de
the appropriate period or pattern of recognition. We determin
vendor-specific objective evidence (VSOE) of selling price, i
management's best estimate of selling price (BESP) if neither
typically use BESP to estimate the selling price of the deliver
In developing the BESP for a unit of accounting, we consider
that were contemplated in negotiating the agreement with the
evaluating whether changes in the key assumptions used to de
consideration between multiple units of accounting.

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Our agreements may contain options which provide the c
substantive if, at the inception of the arrangement, we are at r
Factors that we consider in evaluating whether an option is su
collaborator might obtain from the arrangement without exerc
will be exercised. For arrangements under which an option is
deliverable at the inception of the arrangement and the associ
the option is not priced at a significant and incremental discou
substantive or if an option is priced at a significant and increm
deliverable at the inception of the arrangement and a correspo

We typically receive up-front, non-refundable payments
development agreement. When we believe the license to our i
attributed to the license upon delivery. When we believe the l
deliverables to be provided in the arrangement, we generally
contractual or estimated performance period, which is typical
continually evaluate these periods, and will adjust the period

Research and development funding is recognized as reve
principal under our collaboration arrangements, we record pa
cost-sharing revenue. To the extent that we reimburse the coll
revenue.

We periodically review the basis for our estimates, and v
significantly increase or decrease the amount of revenue reco
judgments which affected the pattern of revenue recognition.
and development services. We are recognizing revenue over t
which was estimated to end in December 2014, the expected
collaboration. Another instance relates to our arrangement wi
the development of ACE-031 or back-up compounds and Shi

In addition to up-front payments and research and develo
upon achievement of a predefined objective. At the inception
milestone is substantive and at-risk. This evaluation includes
entity's performance to achieve the milestone, or the enhancer
at least in part from the entity's performance to achieve the m
consideration is reasonable relative to all of the deliverables a
scientific, regulatory, commercial and other risks that must be
required to achieve the respective milestone, and whether the
in the arrangement in making this assessment. On the milesto

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achievement date, assuming all other revenue recognition crit
payment as license and milestone revenue. For milestones tha
recognize the milestone payment over the remaining service p

Sales and commercial milestones and royalties will be re

Clinical Trial Accruals and Related Expenses

We accrue and expense costs for clinical trial activities p
estimates made as of the reporting date of the work completed
with CROs and clinical trial sites. Some CROs invoice us on
expense is recorded as services are rendered. We determine th
discussion with internal personnel and outside service provide
each reporting period, pursuant to contracts with numerous cl
The significant factors considered in estimating accruals inclu
Costs of setting up clinical trial sites for participation in the tr
While the set-up periods vary from one arrangement to anothe
include clinical site identification, institutional review board,
and pre-study site visits. Clinical trial site costs related to pati

Stock-Based Compensation

We account for our stock-based awards in accordance w
requires all stock-based payments to employees, including gra
recognized in the statements of operations and comprehensive
awards subject to service-based vesting conditions over the re
subject to both performance and service-based vesting conditi
it is probable that the performance condition will be achieved
Stock options granted to non-employees are subject to period
recognized using an accelerated recognition method.

We estimate the fair value of our stock-based awards to
requires the input of highly subjective assumptions, including
risk-free interest rate and (4) expected dividends. Due to the l
public offering in September 2013, and resulting lack of comp
expected volatility on the historical volatility of a group of sim
companies with characteristics that we believe are comparable
with historical share price information sufficient to meet the e
using the daily closing prices for the selected companies' shar
awards. We will continue to apply this process until a sufficie

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information regarding the volatility of our own stock price be
using the "simplified" method, whereby, the expected life equ
The risk-free interest rates for periods within the expected life
the options were granted.

We also estimate forfeitures at the time of grant, and rev
We use historical data to estimate pre-vesting option forfeitur
recorded as a cumulative adjustment in the period the estimat
statements is based on awards that are ultimately expected to

We have computed the estimated fair value of stock opti

	Year Ended December 31,		Ni Sep
	2011	2012	201
Expected volatility	66.0%	69.0%	66
Expected term (in years)	6.0	6.0	6
Risk-free interest rate	1.1%	0.9%	0
Expected dividend yield			

Stock-based compensation totaled approximately $1.2 m
ended September 30, 2013. As of September 30, 2013, we ha
estimates, which is expected to be recognized over a weighte
impact of our stock-based compensation expense for stock-ba
to the potential increases in the value of our common stock ar

The following table summarizes by grant date the numbe
through the date we became a public company, as well as the
share of our common stock on the date of grant:

Date of Grant	Number of Shares Subject to Awards	Exercise P Per Shar
March 1, 2012	22,750	$
June 7, 2012	238,500	$
September 6, 2012	20,250	$
November 13, 2012	250,000	$
December 12, 2012	190,500	$
June 6, 2013	8,750	$

(1) Due to the absence of a public market for our comm
fair value of common stock and represents the deter
date of each grant, taking into consideration various

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(2) The fair value of common stock at the grant date wa
reporting purposes, as discussed more fully below.

Determination of the Fair Value of Common Stoc

For grants made prior to the consummation of our initial
board of directors determined, the fair value of our common s
specialist. Due to the absence of a public market for our comm
stock at various dates considering contemporaneous valuation
Certified Public Accountants Practice Aid, *Valuation of Priva*
Practice Aid. We engaged the valuation firm to perform conte
2013 and June 6, 2013. In conducting the contemporaneous v
believed to be relevant for each valuation conducted, includin
at each valuation date. Within the contemporaneous valuation
significant factors included:

- the prices of our preferred stock sold to o
preferences and privileges of our preferre
preferences of our preferred stock;
- our results of operations, financial positio
- the composition of, and changes to, our m
- the lack of liquidity of our common stock
- our stage of development and business str
- the achievement of enterprise milestones,
- the valuation of publicly traded companie
mergers and acquisitions of peer compani
- any external market conditions affecting t
- the likelihood of achieving a liquidity eve
offering, or IPO, or a sale of our company
- the state of the IPO market for similarly s

The dates of our contemporaneous valuations have not a
exercise prices of the stock options set forth in the table abov
contemporaneous valuations of our common stock and our as
of the grant date. The additional factors considered when dete
valuation and the grant dates included our stage of research a
business conditions.

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There are significant judgments and estimates inherent in
estimates include assumptions regarding our future operating
company valuations associated with such events, and the dete
made different assumptions, our stock-based compensation ex
stockholders could have been different.

In early May 2013, based on the progress of our clinical
biopharmaceutical IPOs, our board of directors determined an
registration statement for an IPO. We selected underwriters a
the probability of an early IPO scenario and therefore in conn
December 31, 2012, we retrospectively re-assessed the estima
between the contemporaneous valuations where there were st
market conditions, progress made in our development progra

Common Stock Valuation Methodologies

These contemporaneous and retrospective valuations we
several valuation approaches for setting the value of an enterp
for allocating the value of an enterprise to its common stock.
precedent transaction methodologies, based on inputs from co
transactions, to estimate the enterprise value of our company.

Methods Used to Allocate Our Enterprise Value to

In accordance with the Practice Aid, we considered the v
capital stock to determine the fair value of our common stock

Current Value Method. Under the curren
allocated to the various series of preferred
conversion values, whichever is greatest.

Option Pricing Method. Under the option
prices based on the liquidation preference
common stock are inferred by analyzing t

Probability-Weighted Expected Return M
value per share based on the probability-v
the possible outcomes available to us, as

We used the PWERM to allocate the enterprise values to
common stock is estimated based upon an analysis of future v
is based, in part, on the plans of our board of directors and ma
probability-weighted present value of expected future investm

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possible outcomes available to us, as well as the economic an
estimated using a probability-weighted analysis of the present
stockholder exit or liquidity event scenarios, either through (1
liquidation preference of the preferred stockholders; or (3) a s
preferred stockholders.

The individual stockholder exit or liquidity scenarios con
and external, present as of each valuation date. The future pro
sale scenarios were estimated by application of the market ap

- valuations of companies prior to the recei
  valuation date;
- estimated third-party sale values based on
- expected dates for a future IPO or sale of

The present values of our common stock under each scen
probability-weighting those present values based on our estim

Finally, the estimated fair value of our common stock wa
our common stock is unregistered, and the holder of a minorit
our company. Our estimate of the appropriate discount for lac
the Practice Aid. We selected a smaller discount after taking i
companies.

March 1, 2012 Common Stock Valuation

We performed a retrospective valuation of our common
that date. For the retrospective valuation at March 1, 2012, sig
each scenario, timing to the liquidity event, discount rate and
in assessing these key valuation assumptions included those m

March 1, 2012 Major Assumptions	IPO Short Term	Lon
Probability of scenario	20%	
Discount for lack of marketability		
Timeline to liquidity (in years)	1.8	
Discount rate common stock	30%	

In applying the market approach to estimate our future e
assumed that a liquidity event would occur in 1.8 years under
development pipeline and our collaborations as of the valuati
pre-money IPO market data for transactions between the third
value in the long-term scenario

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was based on consideration of the high-end of the observed ra
would continue their positive clinical progression.

In applying the market approach to estimate our aggrega
was assumed that a liquidity event would occur in 2.5 years fo
utilized in the low-case scenario considered the median of the
the high-case scenario was based on the comparable transacti
assumed we would make significant progress and achieve cer
consummated, including assumptions that our three most adv
or more additional compounds would enter Phase 1 trials and
activities.

In the sale at a price below liquidation preference scenar
at a value that would not allow the preferred stockholders to r
stockholders.

Under all the exit scenarios considered in the PWERM, t
enterprise valuations, a risk-adjusted discount rate of 30.0% b
discount for lack of marketability which was 0% in the IPO sc
rate was based on consideration of the weighted-average cost
risk factors, the venture capital rates of return detailed in the
pertinent to estimating the discount rate. The resulting value,
2012, was $5.80 per share.

June 7, 2012 and September 6, 2012 Common Stock

We performed a retrospective valuation of our common
that date. For the retrospective valuation at June 7, 2012, sign
scenario, timing to the liquidity event, discount rate and disco
key valuation assumptions included those noted in the follow

June 7, 2012 Major Assumptions	IPO Short Term	Lon
Probability of scenario	25%	
Discount for lack of marketability		
Timeline to liquidity (in years)	1.5	
Discount rate common stock	30%	

In applying the market approach to estimate our future e
assumed that a liquidity event would occur in 1.5 years under
development pipeline and our collaborations as of the valuati
pre-money IPO market data for transactions between the third
value in the long-term scenario was based on consideration of
advanced development projects would continue their positive

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In applying the market approach to estimate our aggrega
was assumed that a liquidity event would occur in 2.5 years fo
utilized in the low-case scenario considered the median of the
the high-case scenario was based on the comparable transacti
assumed we would make significant progress and achieve cer
consummated, including assumptions that our three most adv
or more additional compounds would enter Phase 1 trials and

In the sale at a price below liquidation preference scenar
at a value that would not allow the preferred stockholders to r
stockholders.

Under all the exit scenarios considered in the PWERM, t
enterprise valuations, a risk-adjusted discount rate of 30% bas
discount for lack of marketability which was decreased to 0%
events. The risk-adjusted discount rate was based on consider
companies adjusted for company specific risk factors, the ven
quantitative and qualitative factors considered pertinent to est
value of our common stock as of June 7, 2012, was $6.12 per

The estimated per share fair value of our common stock
March 1, 2012 valuation of $5.80 per share primarily due to t

timing to a prospective liquidity event had

likelihood of an IPO had increased.

As a result of the fact that the number of stock option gra
valuation to determine the retrospective fair value of our com

November 13, 2012 and December 12, 2012 Comm

We performed a retrospective valuation of our common
as of that date. For the retrospective valuation at November 1
occurrence of each scenario, timing to the liquidity event, disc
circumstances considered in assessing these key valuation ass

November 13, 2012 Major Assumptions	IPO Short Term	L
Probability of scenario	30%	
Discount for lack of marketability		
Timeline to liquidity (in years)	1.0	
Discount rate common stock	30%	

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In applying the market approach to estimate our future e
assumed that a liquidity event would occur in 1.0 years under
improvement in IPO market conditions for companies in our i
valuation date. The selected enterprise value in the short-term
third quartile and the maximum of the observed range. The se
consideration of the high-end of the observed range of transac
their positive clinical progression.

In applying the market approach to estimate our aggrega
was assumed that a liquidity event would occur in 2.0 years fo
utilized in the low-case scenario considered the median of the
the high-case scenario was based on the comparable transacti
assumed we would make significant progress and achieve cer
consummated, including assumptions that our three most adv
or more additional compounds would enter Phase 1 trials and

In the sale at a price below liquidation preference scenar
at a value that would not allow the preferred stockholders to r
stockholders.

Under all the exit scenarios considered in the PWERM, t
enterprise valuations, a lower risk-adjusted discount rate of 2
common stock, and a discount for lack of marketability which
events. The risk-adjusted discount rate was based on consider
companies adjusted for company specific risk factors, the ven
quantitative and qualitative factors considered pertinent to est
value of our common stock as of November 13, 2012, was $7

The estimated per share fair value of our common stock
from the June 7, 2012 retrospective valuation estimate of $6.1

timing to a prospective liquidity event has

increased likelihood of an IPO; and

initiation of a Phase 2 clinical trial of dala

As a result of the fact that there were no material change
November 13, 2012 valuation to determine the exercise price

March 31, 2013 Common Stock Valuation

We performed a contemporaneous valuation of our comm
as of that date. For the valuation at March 31, 2013, significan
scenario, timing

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to the liquidity event, discount rate and discount for lack of m
valuation assumptions included those noted in the following t

March 31, 2013 Major Assumptions	IPO Short Term	Lon
Probability of scenario	50%	
Discount for lack of marketability		
Timeline to liquidity (in years)	0.6	
Discount rate common stock	25%	

In applying the market approach to estimate our future e
assumed that a liquidity event would occur in 7 months under
our development pipeline and our collaborations as of the val
the pre-money IPO market data for transactions between the t
enterprise value in the long-term scenario was based on consi
our most advanced development projects would continue thei

In applying the market approach to estimate our aggrega
previously, it was assumed that a liquidity event would occur
selected enterprise value utilized in the low-case scenario con
selected enterprise value for the high-case scenario was based
the observed range. We assumed we would make significant p
pipeline by the time a trade sale was consummated, including
their positive clinical progression, one or more additional con
nominated for pre-IND activities.

In the sale at a price below liquidation preference scenar
at a value that would not allow the preferred stockholders to r
stockholders.

Under all the exit scenarios considered in the PWERM, t
enterprise valuations, a lower risk-adjusted discount rate of 2
common stock, and a discount for lack of marketability which
liquidity events. The risk-adjusted discount rate was based on
companies adjusted for company specific risk factors, the ven
quantitative and qualitative factors considered pertinent to est
value of our common stock as of March 31, 2013, was $8.68

The estimated per share fair value of our common stock
the November 13, 2012 valuation of $7.88 per share primarily

NASDAQ Biotechnology index increasin

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improved capital market conditions for bi
and their valuations;

increased likelihood of our board of direc

decreased timing to a prospective liquidit

initiation of several Phase 2 clinical trials

June 6, 2013 Common Stock Valuation

We performed a contemporaneous valuation of our comm
of that date.

For the contemporaneous valuation at June 6, 2013, sign
scenario, timing to the liquidity event, discount rate and disco
assessing these key valuation assumptions included those not

June 6, 2013 Major Assumptions	IPO Short Term	Lon
Probability of scenario	60%	
Discount for lack of marketability		
Timeline to liquidity (in years)	0.4	
Discount rate common stock	25%	

In applying the market approach to estimate our future e
assumed that a liquidity event would occur in 5 months under
our development pipeline and our collaborations as of the val
the pre-money IPO market data for transactions between the t
enterprise value in the long-term scenario was based on consi
our most advanced development projects would continue thei

In applying the market approach to estimate our aggrega
previously, it was assumed that a liquidity event would occur
selected enterprise value utilized in the low-case scenario con
selected enterprise value for the high-case scenario was based
the observed range. We assumed we would make significant p
pipeline by the time a trade sale was consummated, including
their positive clinical progression, one or more additional con
nominated for pre-IND activities.

In the sale at a price below liquidation preference scenar
at a value that would not allow the preferred stockholders to r
stockholders.

Under all the exit scenarios considered in the PWERM, t
enterprise valuations, a lower risk-adjusted discount rate of 2
common stock, and a discount for lack of marketability which

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other assumed liquidity events. The risk-adjusted discount rat
biotechnology companies adjusted for company specific risk
analysis of other quantitative and qualitative factors considere
the estimated fair value of our common stock as of June 6, 20

The estimated per share fair value of our common stock
March 31, 2013 valuation of $8.68 per share primarily due to

- timing to a prospective liquidity event has
- NASDAQ Biotechnology (^NBI) index i
- improved capital market conditions for bi
  offerings and their initial public offering
- the occurrence of the organizational meet
- received two FDA Orphan Designations f
- initiated Phase 2 trial of ACE-536 in with

Initial public offering price

The initial public offering price of $15.00 per share was
comparison, our estimate of the fair value of our common sto
the initial public offering price was not derived using a forma
underwriters. Among the factors that were considered in setti

- an analysis of the typical valuation ranges
- the general condition of the securities ma
  stock of generally comparable companies
- an assumption that there would be a recep
  and
- an assumption that there would be sufficie
  the initial public offering.

The initial public offering price reflected a significant in
believe the difference is due to the following factors:

- The contemporaneous valuation prepared
  offering with an anticipated completion d
  However, the consideration of different s
  offering price and the valuation as of June

Advancement in the dose escalation phas
β-thalassemia;

Advancement in the treatment of patients
cell carcinoma of the head and neck;

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Improved capital market conditions for co
offerings by such companies and in the in
their most recent pre-IPO equity financing

The initial offering price necessarily assu
stock had been created and that our prefer
offering and, therefore, excluded the mark
initial public offering, the superior rights
the contemporaneous valuations over the
the IPO scenarios and 5% for the trade sa

In the public markets we believe there are
certain of our clinical assets than the valu
will in fact be the case. As described abov
fair value of our common stock and this m
offering price. The initial public offering
determined by negotiation between us and
of June 6, 2013 was not a factor in setting

The price that investors were willing to pa
not been expressly considered in our prior
able to quantify.

There are significant additional judgments and estimates
include assumptions regarding our future performance, includ
determination of the appropriate valuation methods. If we had
been different. The foregoing valuation methodologies are no
completion of our initial public offering. We cannot make ass
are cautioned not to place undue reliance on the foregoing val

Warrants to Purchase Preferred Stock and Common Stoc

As of September 30, 2013, we had warrants outstanding
857,586 shares of our common stock contain a provision requ
securities convertible into or exercisable for common stock, a
requires the warrants to be classified as liabilities and measur
income (expense). The fair value of the warrants to purchase
warrants to purchase common stock are classified as liabilitie
estimated that there would be up to three future financing eve
modifications to the warrant liabilities are recorded in earning
estimating the fair value of our warrant liabilities include the
estimated fair value of the stock underlying the warrant, and t

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Additionally, prior to the completion of our initial public
Series B, Series C-1 and Series D-1 preferred stock. Freestand
classified as liabilities and recorded at fair value regardless of
redemption. The warrants were subject to re-measurement at
of other income (expense), net. We measured the fair value of
model. In connection with the closing of our initial public offe
Preferred Stock, Series C-1 Preferred Stock, and Series D-1 P
classified as a component of equity and are no longer subject
unchanged.

Emerg

The Jumpstart our Business Startups Act of 2012, or the
an extended transition period to comply with new or revised a
of this provision and, as a result, we will comply with new or
opt out of the extended transition period under the JOBS Act

Comparison of the Nine Months Ended September 30, 201

(in thousands)	Nine Months End September 30, 2012	20
Revenue:		
Collaboration revenue:		
License and milestone	$ 7,226	$
Cost-sharing, net	4,043	
Total revenue	11,269	
Costs and expenses:		
Research and development	25,646	
General and administrative	6,318	
Total costs and expenses	31,964	
Income (loss) from operations	(20,695)	
Other income (expense), net	(1,508)	(
Net income (loss)	$ (22,203)	$

Revenue. We recognized revenue of $45.7 million in t
period in 2012. The $34.4 million increase was primarily due
collaboration for the first patient dosed in a Phase 2 trial in A
Shire ended our collaboration as of June 30, 2013. The remai
revenue from Celgene of $6.9 million due to Celgene assumi
January 1, 2013, and recognition of $0.2 million deferred rev

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in net cost-sharing revenue from Shire of $1.3 million due to

The following table shows revenue from all sources for t

(in thousands)	Nine Months Ended September 30, 2012	2013
Collaboration revenue:		
Celgene:		
License and milestone	$ 1,491	$ 11,72
Cost-sharing, net	2,106	8,96
Total Celgene	3,597	20,68
Shire:		
License and milestone	5,735	24,32
Cost-sharing, net	1,937	70
Total Shire	7,672	25,02
Total collaboration revenue	11,269	45,71
Total revenue	$ 11,269	$ 45,71

Research and Development Expenses. Research and d
2013, compared to $25.6 million in the same period in 2012.
with clinical activity totaling $2.8 million, partially offset by

General and Administrative Expenses. General and ad
2013, compared to $6.3 million in the same period in 2012. T
services in connection with our litigation with the Salk Institu
connection with business development activities totaling $2.3

Other Expense, Net. Other expense, net was $14.2 mil
same period in 2012. This $12.7 million increase was primari
warrants of $12.0 million and an increase in interest expense
2013.

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Comparison of Years Ended December 31, 2011 and 2012

(in thousands)	Year Dece 2011
Revenue:	
Collaboration revenue:	
License and milestone	$ 74,406
Cost-sharing, net	4,760
Contract manufacturing	1,745
Total revenue	80,911
Costs and operating expenses:	
Research and development	32,713
General and administrative	8,142
Cost of contract manufacturing revenue	1,500
Total costs and expenses	42,355
Income (loss) from operations	38,556
Other expense, net	(2,290)
Net income (loss)	$ 36,266

Revenue. We recognized revenue of $15.3 million for December 31, 2011. The $65.6 million decrease in revenue in revenue, because during 2011, upon signing the ACE-536 Ce payments and deferred revenue totaling $54.8 million. During Alkermes collaboration. Also, in 2012 we did not recognize a license and milestone revenue was offset by higher 2012 cost We also recognized $1.7 million for a contract manufacturing

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The following table shows revenue from all sources for t

(in thousands)	Year Ended December 31, 2011	20
Collaboration revenue:		
Celgene:		
License and milestone	$ 63,607	$
Cost-sharing, net	(121)	
Total Celgene	63,486	
Shire:		
License and milestone	8,392	
Cost-sharing, net	4,148	
Total Shire	12,540	
Alkermes:		
License and milestone	2,407	
Cost-sharing, net	733	
Total Alkermes	3,140	
Total collaboration revenue	79,166	
Contract manufacturing revenue	1,745	
Total revenue	$ 80,911	$

Research and Development Expenses. Research and d
compared to $32.7 million for the year ended December 31, 2
to preclinical animal toxicology studies of $2.6 million, paten
activities of $0.5 million, contract labor of $0.5 million, outso
offset by decreases in expenses related to depreciation of $1.3
in-licensing of $0.5 million.

General and Administrative Expenses. General and ad
compared to $8.1 million for the year ended December 31, 20
legal costs of $0.4 million in connection with litigation activit

Cost of Contract Manufacturing Revenue. There was
compared to $1.5 million for the year ended December 31, 20
provided during 2012.

Other Expense, Net. Other expense, net was $3.7 milli
ended December 31, 2011. The increase was primarily due to
redeemable convertible preferred stock and common stock.

Liquidity and Capital Resources

We have incurred losses and cumulative negative cash fl
2013, we had an accumulated deficit of $174.2 million. We a
expect that our research and development and general and adm

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result, we will need additional capital to fund our operations,
other sources, including potential additional collaborations.

As of September 30, 2013, our operations have been fun
equity investments from our partners, and $192.6 million in u
partners.

In September 2013, we completed the sale of 6,417,000
pursuant to the underwriters' full exercise of their option to pu
net proceeds to us of $86.8 million, after deducting underwrit
private placement of $10 million of our common stock at a pr

As of September 30, 2013, we had $116.5 million in cas
accordance with our investment policy, primarily with a view
mutual funds consisting of U.S. government-backed securitie

We entered into a new venture debt facility on June 7, 20
After an interest-only period, we began paying down principa
is payable monthly. The debt facility also included a closing f
$1.2 million which is due at the time of the final payment. We
interest rate of approximately 11.8%. We are not subject to an
as of, or acquired after, June 7, 2012, except for intellectual p

Cash Flows

The following table sets forth the primary sources and us

(in thousands)	
Net cash provided by (used in):	
Operating activities	$
Investing activities	
Financing activities	
Net increase (decrease) in cash and cash equivalents	$

Operating Activities. The significant decrease in net ca
compared to the nine months ended September 30, 2012, is pr
first quarter of 2013.The significant decrease in cash provided
year ended December 31, 2011, is primarily due to the upfron
received during 2011.

Net cash used in operating activities was $18.3 million f
of $3.8 million adjusted for non-cash items including an incre
$1.4 million,

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depreciation and amortization of $0.7 million, forgiveness of
million, and amortization of deferred debt issuance costs of $
$29.9 million. The significant items in the change in operatin
primarily to the recognition of $24.3 million of deferred reve
2013. Other components of the change in operating assets an
collaboration receivables of $1.3 million, an increase in prepa
increase in accounts payable of $0.2 million.

Net cash used in operating activities was $29.4 million f
of $22.2 million adjusted for non-cash items including an incr
$0.9 million, depreciation and amortization of $1.1 million, a
issuance costs of $0.1 million, and a net decrease due to chan
change in operating assets and liabilities include a decrease in
deferred in connection with up-front payments for the Celgen
and an increase in prepaid expenses and other current assets
include an increase in collaboration receivables of $1.0 millio
$0.4 million.

Net cash used in operating activities was $38.9 million f
$32.6 million adjusted for non-cash items including an increa
$1.2 million, depreciation and amortization of $1.3 million, a
assets and liabilities of $11.5 million. The significant items in
of $9.7 million due to the ongoing recognition of revenue def
agreements, a decrease in accounts payable of $1.3 million an
increase in accrued expenses of $1.6 million. Other componen
expenses and other current assets of $0.6 million and a decrea

Net cash provided by operating activities was $9.1 millio
$36.3 million, which was impacted by non-cash items includi
$1.4 million, an increase in the fair value of warrants of $0.5
discount of $0.2 million and a net decrease in operating assets
assets and liabilities include a decrease in deferred revenue of
the Celgene collaboration upfront payments as a result of the
expenses of $2.8 million, offset in part by a decrease in prepa
receivables of $1.8 million. Other components of the change
$0.3 million and an increase in deferred rent of $0.2 million.

Investing Activities. Net cash used in investing activiti
for the nine months ended September 30, 2012 and consisted

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Net cash used in investing activities was $27,000 for the
2012 and consisted of purchases of property and equipment.

Financing Activities. Net cash provided by financing a
consisted of $97.4 million in net proceeds received from the c
$1.8 million of principal payments made to pay down our ven
preferred stock, common stock and warrants to purchase com
months ended September 30, 2012 and consisted primarily of
line in June 2012, offset by $6.2 million of principal payment

Net cash provided by financing activities was $21.1 mill
of net proceeds received from the sale of 9,704,756 shares of
stock options and warrants to purchase common stock, offset
debt facility.

Net cash provided by financing activities was $13.9 mill
proceeds received from the drawdown of our new venture deb
options and warrants to purchase common stock, offset by $6

Operating Capital Requirements

To date, we have not generated any revenue from produc
sales. We will not generate revenue from product sales unless
of our current or future protein therapeutics. We anticipate tha
losses to increase as we continue the development of, and see
therapeutics, and begin to commercialize any approved produ
therapeutics, and we may encounter unforeseen expenses, dif
our business. Since the closing of our initial public offering, v
operating as a public company. We anticipate that we will nee

We believe that the net proceeds we receive from this of
and cash equivalents will be sufficient to fund our projected c
additional capital for the further development of our existing
pursue other development activities related to additional prote

Until we can generate a sufficient amount of revenue fro
equity offerings, or debt financings or other sources including
favorable terms, if at all. If we are unable to raise additional c
significantly delay, scale back or discontinue the developmen
raise additional funds through the issuance of

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additional debt or equity securities, it could result in dilution t
securities may have rights senior to those of our common stoc
restrict our operations and potentially impair our competitiver
ability to acquire, sell or license intellectual property rights ar
business. We may not be able to enter into new collaboration
events could significantly harm our business, financial condit

Our forecast of the period of time through which our fina
statement and involves risks and uncertainties, and actual resu
assumptions that may prove to be wrong, and we could utilize
requirements, both near and long-term, will depend on many

the achievement of milestones under our

the terms and timing of any other collabo

the initiation, progress, timing and compl
and potential protein therapeutic candidat

the number and characteristics of protein

the progress, costs and results of our clini

the outcome, timing and cost of regulator

delays that may be caused by changing re

the cost and timing of hiring new employ

the costs involved in filing and prosecutin

the costs and timing of procuring clinical

the extent to which we acquire or invest i

the costs involved in defending and prose
with the Salk Institute. See "Business Lit

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Contractua

The following is a summary of our long-term contractua

(in thousands)	Total	Less than 1 Year
Operating lease obligations(1)	$ 23,979	$ 4,52
Less: sublease income(2)	(1,407)	(58
Venture debt facility(3)	24,320	5,30
Total	$ 46,892	$ 9,24

(1) We lease office space at 128 Sidney Street and 149 that expire in September 2018, and at 12 Emily Stre in May 2015.

(2) In February 2011, we entered into a sublease for 14

(3) In June 2012, we entered into a $20.0 million ventu under this debt facility are secured by our assets and Interest rates were fixed at the time of drawdown, v

We also have obligations to make future payments to thi development, regulatory and commercial milestones. We hav because the achievement and timing of these milestones is no

Under our license agreement with the Bet in patent rights related to the treatment of tyrosine kinase inhibitors, we agreed to pa $1.0 million. In addition, we are required drug labeled for treatment regimens that a

Under our license agreement with the Luc the first cloning of the type I activin recep pay LICR specified development and sale and commercialization of dalantercept. In worldwide net product sales of dalanterce after patent expiration. If we sublicense th excluding payments based on the level of

Under our two license agreements with th type II activin receptors, if we sublicense excluding payments based on sales. Unde payments totaling up to $2.0 million for s development milestone payments of up to pay Salk royalties in the low single-digits rights of products claimed in

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the licensed patents, or products derived f
continuing at a reduced rate for a period o

We enter into contracts in the normal course of business
for preclinical safety and research studies, research supplies a
provide for termination on notice, and therefore are cancelabl
commitments.

Net Opera

We have deferred tax assets of approximately $68.2 mill
due to uncertainties surrounding our ability to realize these ta
net operating loss, or NOL, carryforwards and research and d
NOL carryforwards of approximately $93.3 million and state
any. These federal NOL carryforwards expire at various times
2032. In general, if we experience a greater than 50 percent a
period, or a Section 382 ownership change, utilization of our
Section 382 of the Internal Revenue Code of 1986, as amende
the NOL carryforwards before utilization and may be substan
offering or as a result of future changes in our stock ownershi
NOL carryforwards may be limited or lost.

Off-B

We did not have during the periods presented, and we do
regulations of the Securities and Exchange Commission.

Quantitative and Q

We are exposed to market risk related to changes in inter
million. Our cash equivalents are invested in money market m
to market risk is interest rate sensitivity, which is affected by
investments are in short-term securities. Due to the short-term
immediate 100 basis point change in interest rates would not

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Overview

We are a clinical stage biopharmaceutical company focu
therapeutics for cancer and rare diseases. Our research focuse
superfamily, a large and diverse group of molecules that are k
are leaders in understanding the biology of the TGF-β superfa
coupling our discovery and development expertise, including
engineering and manufacturing capabilities, we have built a h
protein therapeutic candidates with novel mechanisms of acti
significantly improve clinical outcomes for patients with canc

We focus on discovering and developing protein therape
collectively referred to as the TGF-β superfamily. These ligar
intra-cellular changes in gene expression that guide cell grow
an under-explored and diverse set of drug targets with the pot
tissues.

We have three internally discovered protein therapeutic c
trials, focused on cancer and rare diseases. Our two most adva
cell production through a novel mechanism. Together with ou
ACE-536 to treat anemia and associated complications in pati
cell disorders are generally unresponsive to currently approve
designed to inhibit blood vessel formation through a mechani
cancer drugs that inhibit blood vessel formation, the vascular
dalantercept primarily for use in combination with these prod
approximately $142.1 million on research and development fr

Sotatercept and ACE-536 have already shown promising
human clinical trials with sotatercept in over 160 healthy volu
healthy volunteers. In these studies, both sotatercept and ACE
these results, we and Celgene have initiated Phase 2 clinical t
the ongoing trials of sotatercept and ACE-536 in patients with
hemoglobin in non-transfusion dependent patients at the three
both of these protein therapeutic candidates in one or both of

With respect to our third clinical stage protein therapeuti
patients with advanced solid tumors. Of the 29 evaluable pati
according to RECIST criteria. Additionally, we have studied t
advanced head and neck cancer. Of the 29 evaluable patients
and ten had stable disease, according to RECIST criteria. Our

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with an approved VEGF pathway inhibitor where we have pr
dalantercept in combination with a VEGF pathway inhibitor p
xenographs. In an ongoing Phase 2 clinical trial of dalanterce
with advanced renal cell carcinoma we have completed the do
mg/kg is well tolerated in combination with the FDA approve
study and plan to start the randomized controlled part of the s
trial of dalantercept in combination with the VEGF pathway i

In addition to our clinical stage programs, we are develo
trial that we expect to initiate by the end of 2014. ACE-083 h
injected, with minimal systemic effect. We are focused on the
of specific muscles may provide a clinical benefit, including i
atrophy.

We are developing sotatercept and ACE-536 through ou
became responsible for paying 100% of worldwide developm
potential development, regulatory and commercial milestone
receive a royalty on net sales in the low-to-mid 20% range. W
which our commercialization costs will be entirely funded by

We have not entered into a partnership for dalantercept a

As of September 30, 2013, our operations have been fun
$86.8 million from investors in our initial public offering, $49
Alkermes, Inc. (Alkermes) and $192.6 million in upfront payr
collaboration partners.

Our Strategy

Our goal is to be a leader in the discovery, development
Key components of our strategy are:

Advance sotatercept and ACE-536 into P
developing sotatercept and ACE-536. Ass
and MDS, we plan to initiate Phase 3 clin
by the end of 2014 or early 2015.

Explore new indications for sotatercept a
research to assess the opportunity for sota
hemoglobinopathies, which include disea
preclinical and clinical data in β-thalasse
therapeutic candidates, we believe there i
continue to explore development of these

Advance dalantercept into Phase 3-enab
initiate additional clinical trials of dalante

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either an approved anti-angiogenesis agen
patients with liver cancer and other trials

Utilize our discovery and development pl
sotatercept, ACE-536 and dalantercept, al
we intend to continue to discover and dev
TGF-β superfamily. We plan to bring an
diseases involving muscle loss. We are al
dalantercept for the treatment of diseases
developing new protein therapeutic candi

Strategically leverage collaborations to d
$250.0 million from our corporate partner
ACE-536 provide us with significant func
commercial capabilities. We will continue
development or commercialization of oth

Establish commercialization and market
retained co-promotion rights in North Am
intend to build hematology, oncology and
commercialize our protein therapeutic can

The Acceleron Discovery Platform: Novel Approaches to

Since our founding, we have focused on developing prot
ligands, that are collectively referred to as the TGF-β superfa
triggering intra-cellular changes in gene expression that guide
represent a diverse and underexplored set of drug targets with
and tissues. Applying our proprietary discovery and developm
and its receptors, we have generated a robust pipeline of inno
mechanisms underlying cancer and rare diseases.

Our Focus The TGF-β Superfamily

On a daily basis, the human body must orchestrate the gr
Stem cells and precursor cells are undifferentiated cell types t
required, these undifferentiated cells divide and, through a se
repair the affected tissue. Decades of research have identified
and differentiation of stem and precursor cells.

Until recently, regulation of the erythropoietin pathway
Members of the TGF-β superfamily are now recognized as im
members of the TGF-β superfamily ameliorates anemia in mo
two protein therapeutic candidates, sotatercept and ACE-536,
diseases.

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Members of the TGF-β superfamily also play a significa
have shown that mice with a genetic defect in a particular rec
reduced blood vessel formation in the tumor. We have used th
treatment of cancer.

Members of the family are also significant regulators of
myostatin, causes profound increases in skeletal muscle. A na
"double-muscled" breeds of cattle and in the "bully whippet"
increased muscle mass or function. Furthermore, a mutation i
exceptional musculature and strength. We are actively workin

Ligands of the TGF-β superfamily cause these profound
illustration below, a ligand of the superfamily initiates intrace
Upon binding to the ligand, the receptor activates specific tra
activated Smad proteins regulate gene expression and guide c

The TGF-β superfamily ligands are divided into subgrou
Morphogenetic Proteins (BMPs) and the TGF-β subgroup (fo
focus on the activin, GDF and BMP subgroups.

We believe that, by employing our proprietary discovery
TGF-β superfamily signaling and unlock the therapeutic pote

Acceleron Approach

By combining the powerful biology of the TGF-β superf
engineering and manufacturing capabilities, we have built a r
mechanisms underlying cancer and rare diseases.

We have taken a comprehensive, receptor-focused appro
receptors for the superfamily act as control points for the liga
We have in-licensed patent rights for nine of the 12 receptors
comprehensive panel of ligands. In the body, these ligands ar
ligand-receptor interactions and diminishing signaling in the
therapeutic

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candidates using the ligand-binding part of the receptors, dep
of ligands in each biological process. We link the ligand-bind
antibody known as the Fc domain, depicted in the lower part
resulting "fused" proteins can be administered by simple intra
time to permit dosing on a weekly or monthly basis.

Protein therapeutics constructed this way are referred to
therapeutics on the market belong to this category including E

As shown in the figure below, our receptor fusion protei
those ligands from binding to the cell surface receptors, and t

To take full advantage of our proprietary discovery and
capabilities to rapidly and cost-effectively create, test and adv
allows us to create and optimize our receptor fusion proteins.
our protein therapeutic candidates, and assess the activity of t

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animals using our internal animal pharmacology facility or th
to manufacture Phase 1 and Phase 2 clinical material quickly
compliant protein production facility to support clinical devel

We use our integrated platform of research, developmen
advance our protein therapeutic candidates. Our robust clinica
particularly in the areas of cancer and rare diseases.

Our Product Pipeline

We have four development stage protein therapeutic can
fourth we expect to begin human clinical trials by the end of 2
three investigator-sponsored trials with sotatercept. We are co
dalantercept and overseeing a collaborative group-sponsored
with dalantercept in patients with hepatocellular carcinoma in
end of 2014.

Sotatercept and ACE-536

Anemia in Patients with β-thalassemia and MDS

Erythropoiesis, the process by which precursor cells prol
and active processes in human biology. The primary role of re
any given time, there are approximately 25 trillion red blood
number of cells. The human body produces 2.4 million new re
cells referred to as red blood cell precursors. These precursor
differentiation, to become more specialized cells to carry out
of red blood cell production is normally tightly controlled by
positive regulator that stimulates proliferation of early red blo

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cells depicted in the figure below. Based on our research, it is
regulators of red blood cell precursors, starting with the Pro-E
TGF-β superfamily restrain the maturation of these precursor

Depicti

In certain diseases, the highly active process of red blood
functional red blood cells, a condition known as anemia. Ane
stimulating agents, such as recombinant erythropoietin, that s
certain diseases, such as β-thalassemia and MDS, anemia is c
known as ineffective erythropoiesis.

Anemias caused by ineffective erythropoiesis are not we
erythropoiesis is characterized by an over-abundance of early
to properly differentiate into healthy, functional red blood cel
which exacerbates the over-abundance of early stage precurso
early stage precursors, the increase in the number of these cel

Depictio

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Based on our preclinical research, we believe that TGF-β the maturation of these early stage red blood cell precursors. I regulators of late stage red blood cell precursors and promote

We are developing sotatercept and ACE-536, through ou erythropoiesis-stimulating agents are either not approved or a and MDS in which anemia is caused by ineffective erythropo process. Although similar in terms of their effects on red bloo and inhibit ligands. Unlike ACE-536, sotatercept binds to and bone mass and biomarkers of bone formation in clinical trials kidney disease, where it has the potential to treat both anemia inhibits the growth of myeloma cells. Therefore, sotatercept i improve the anemia and the bone loss associated with the dise

β-thalassemia

The thalassemias comprise a heterogeneous group of dis hemoglobin. Hemoglobin is a four-subunit protein complex fo group that binds to and carries oxygen molecules within red b β-thalassemia, depending on whether the genetic defect lies in prevalent throughout the Mediterranean region, Middle East, The Thalassaemia International Federation estimates that ther 20,000 of which are in the United States and Europe, who are many β-thalassemia patients in the same regions who are not have hemoglobin levels that are approximately half that of no

Anemia of β-thalassemia is primarily a result of ineffecti β-subunits of hemoglobin resulting in an excess amount of th a cellular component called the proteasome. The proteasome cellular components and organelles such as mitochondria whi blood cell. In thalassemia, the proteasome becomes saturated other cellular components and participate in the maturation pr not eliminated by the proteasome form aggregates, called hem with the saturation of the proteasome by unpaired α-subunits, blood cells are filtered out by the spleen and have a reduced li

Patients with the most severe form of β-thalassemia proc consequently a high number of hemichromes. These patients regular and lifelong red blood cell transfusions, usually every intensive transfusion regimen contributes to a condition know

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overload, which is the principal cause of mortality. Conseque
standard treatment in these patients and typically begins after
chelation therapy alone costs between $25,000 and $40,000 p
depends largely on whether patients are maintained on an ade
and/or iron chelation is associated with a poor prognosis and
infection from transfusions as well as toxicities related to iron

Patients with an intermediate form of β-thalassemia, wh
suffer from a wide range of debilitating conditions. The ongo
of organ systems. By the second decade of life, most of these
half that of normal individuals. In an attempt to correct this cl
continued stimulation of the early red blood cell precursors in
bone marrow that it leads to skeletal deformities, porosity of t
the result in part of continuous clearance by the spleen of the
to require removal of their spleen, which in turn leads to wors
significant complication even in the absence of red blood cell
ongoing ineffective erythropoiesis. Patients also suffer from v
endocrine glands. Importantly, iron can also accumulate in th
failure.

No drug is approved to treat the anemia of β-thalassemia
for β-thalassemia, although this option is limited by the availa
marrow transplant procedure. Consequently this treatment is

Myelodysplastic Syndromes

Myelodysplastic syndromes, or MDS, are a group of het
differentiation of blood precursor cells, including red blood c
cells, often accompanied by decreases in white blood cells an
Anemia is present in the vast majority of MDS patients at the
diagnosed in individuals 60 years of age or older. Cancer surv
10,000 to 15,000 cases and the overall U.S. prevalence at app

Hematopoietic stem cell transplantation represents the o
morbidity and mortality of this approach limits its use. Appro
patients are typically treated with inhibitors of DNA methyltr
(2012 U.S. sales of $233 million for MDS). Of the remaining
a specific chromosomal mutation and are typically treated wit
patients typically receive red blood cell transfusions or erythr
approved by the FDA or the EMA for the

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treatment of anemia in MDS patients. Our internal market res
in annual U.S. sales from their use in this disease.

The anemia in MDS is primarily due to ineffective eryth
levels substantially above the normal range, indicating that th
The ineffective erythropoiesis of MDS may be caused by exc
blood cell maturation. For this reason we believe that blockin
Approximately 50% of MDS patients are unresponsive to the
transfusions, which can increase the risk of infection and iron
erythropoiesis is a major cause of morbidity in MDS patients.

Chronic Kidney Disease

Anemia is a common complication of chronic kidney dis
extent in the liver, patients with chronic kidney disease produ
complications of chronic kidney disease include a condition k
diseased kidneys fail to maintain proper levels of calcium and
bones and vascular calcification. Bone and vascular disorders
disorders affect almost all patients receiving dialysis. Accordi
disease patients receiving dialysis in the United States. Erythr
years. Sotatercept has the potential to differentiate itself from
effects on bone metabolism observed following the administr
Additionally, in mouse models of vascular calcification, sotat

Sotatercept Clinical and Preclinical Development

Sotatercept is a soluble receptor fusion protein consisting
Fc domain of human IgG1. Sotatercept acts as a protein trap f
has increased red blood cells in multiple clinical trials.

Ongoing Phase 2 Clinical Trials of Sotatercept

Our collaboration partner, Celgene, is currently conducti
and chronic kidney disease. The FDA has granted orphan des
Celgene plans to submit an application for orphan drug desig
academic institutions, Celgene is also overseeing three invest

Celgene-Sponsored Clinical Trials

β-***thalassemia.*** Celgene is conducting a Phase 2 clinica
and efficacy of sotatercept in adults with β-thalassemia. The
further dose

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escalation up to 1.0 and 1.5 mg/kg, given subcutaneously onc
discretion of the investigator for up to 22 months. Each cohor
expansion phase at a selected dose level in up to ten additiona
has completed enrolling the 0.1, 0.3, and 0.5 mg/kg cohorts a
of the trial is to identify a safe dose level and to measure effic
20% compared to the pretreatment transfusion burden for eac
level by ≥1 g/dL compared to the baseline hemoglobin, sustai
of sotatercept on iron overload, which is an important cause c
trial is being conducted in six sites in Italy, France, Greece, a

Sotatercept has generated encouraging preliminary data

As shown in the figure below, sotatercept has generated
Phase 2 clinical trial who are non-transfusion dependent base

Mean Change in Hemog
Non-Transfusion Dependent

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Another analysis of the data from this trial also shows do
the first two months of receiving the first dose of sotatercept:

84% of non-transfusion dependent patien
hemoglobin, while none of the non-transf
threshold.

33%, 16% and 0% of non-transfusion dep
and 0.1 mg/kg dose levels, respectively.

Maximum Change in Hemoglobin Level From Baseline in
(Day 6

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The figure below shows that there is a statistically signif
hemoglobin during the first three cycles across the three lowe
serum and the y-axis shows the patients' maximum change in
does the maximum increase in hemoglobin.

Relationship Between Drug Exposure and Hemoglobin Le
Cycles (Da

Only patients completing
(AUC) area

We expect Celgene to establish a range of recommended
the clinical trials continue. We expect that in future clinical tr
undergo individualized dose titration based on hemoglobin re
We expect Celgene to continue to dose escalate in this trial w
this trial. If this activity is confirmed with an acceptable safet
of 2014 or early 2015. At the dose levels that have been studi
Based on currently projected timelines, which are subject to c
follows: data from additional dose levels and extended treatm
quarter of 2014, and additional data in the fourth quarter of 20

MDS. Celgene is conducting a Phase 2 clinical trial of
MDS. The dose levels to be studied are 0.1, 0.3, 0.5 and 1.0 a
and up to three additional cycles for late responders, with con
20 patients receiving a single dose level during the dose escal

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phase, followed by an expansion phase at a selected dose leve
December 2012. Celgene has currently completed the 0.1, 0.3
escalation may go up to 2.0 mg/kg. The primary outcome mea
transfusions of <4 units of red blood cells in the eight weeks p
period ≥8 weeks in the absence of red blood cell transfusions.
weeks prior to dosing, HI-E is a decrease of ≥4 units of red bl
transfused in the eight weeks prior to treatment. This trial wil
trial is being conducted at up to 23 sites in the United States a
timelines, which are subject to change, we expect additional c
escalation portion of the clinical trial in the second quarter of

Chronic Kidney Disease. Celgene is conducting two P
first is a Phase 2 clinical trial with sotatercept designed as a ra
pharmacokinetics, safety, efficacy, tolerability and pharmaco
disease on hemodialysis. The first patient in the trial was first
subcutaneously as a single dose. Subsequent dose levels to be
weeks for up to eight cycles. Each cohort will include up to 1
level during the dose escalation phase, followed by an additio
and 0.5 mg/kg cohorts and is now enrolling patients in the 0.7
endpoints include effects on hemoglobin and serum markers o
States and may enroll up to 56 patients.

Early data from this trial are encouraging. An interim an
increases in hemoglobin in end stage renal disease patients on
Clinical Meeting in April 2014.

Based in part on these interim data, and previously obser
phase 2 clinical trial in Europe with sotatercept in patients wi
trial was first dosed in December 2013. The study is designed
treat anemia and to control the adverse manifestations of chro
of the study must first be on a stable dose of an erythropoiesis
treatment free period of approximately five days, will then be

The first part is a dose-escalation study of intravenous ar
to evaluate pharmacokinetics, safety and tolerability. Patients
weeks up to a total of eight doses and followed for approxima
inform the dosing regimens to be tested in the second part of
approximately 230 patients to evaluate the efficacy and safety
part two of the study include the change in mean hemoglobin
hemoglobin levels within a target range after switching from

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to sotatercept. Measures of biomarkers for bone formation an
imaging of vascular calcification.

Sotatercept Investigator Sponsored Trials

Through collaborations with leading academic institutio
Diamond-Blackfan anemia and myelofibrosis.

Multiple myeloma is a cancer of the bone
bone marrow failure, bone pain, bone frac
anemia. Investigators at the Massachusett
combination of anti-myeloma therapies R
cancer cells along with improving anemia

Diamond-Blackfan anemia is a rare and s
Shore Long Island Jewish Health System
with Diamond-Blackfan anemia who are

Myelofibrosis is an acquired disease of th
leading to bone marrow failure and inabil
Investigators at the MD Anderson Cancer
patients with myeloproliferative neoplasm

Completed Clinical Trials

Six human clinical trials of sotatercept, including Phase
multiple myeloma, breast cancer, and non-small cell lung can
volunteers, we observed increases in red blood cells and hem
of 1.0 mg/kg was almost 3 g/dL, which is similar to receiving
placebo-controlled trial in patients with multiple myeloma rec
dose-dependent increases in hemoglobin. In the placebo and 0
increase in hemoglobin at day 29 of the trial compared to thei
patients, respectively, achieved at least a 1.5 g/dL increase in
randomized, placebo-controlled clinical trial in breast cancer
produced dose-dependent increases in hemoglobin levels. In t
hemoglobin levels increase to at least 11 g/dL maintained for
stimulating agent. In the 0.3 mg/kg cohort, 22% of the patient
this threshold. In a randomized, dose-ranging Phase 2 trial of
administered at a fixed dose of 15 or 30 mg given subcutaneo
receive red blood cell transfusions within the first four weeks
week 2 and 16% of patients at week four. Given the results of
the future in one or more of these indications.

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Safety

Across the completed clinical trials, sotatercept has been treatment-related serious adverse event was a report of persist elevated blood pressure cannot be determined, it was an expe Commonly observed adverse events included headache, infec and asthenia. In three studies of patients with cancer (myelom The event was evaluated as probably related to the concurrent related to sotatercept. One patient with advanced breast cance disease that were evaluated as possibly related to sotatercept. cerebrovascular accident (blockage of a blood vessel in the br

Among the ongoing clinical trials managed by Celgene, reported in the MDS trial. In the β-thalassemia trial as of Dec suspected as related to sotatercept: bone pain and superficial t 0.5 mg/kg dose level had a treatment-related Grade 3 adverse treatment.

Sotatercept Investigational New Drug (IND) Appli

Sotatercept is the subject of three separate company-spo 2006 for the treatment of postmenopausal osteoporosis. There IND to the FDA on March 27, 2009 to assess the use of sotate transferred sponsorship of both INDs to Celgene on January 1 with lower-risk MDS. A third IND was submitted by Celgene patients with end-stage renal disease. In addition, sotatercept The first CTA is for a Phase 2 study for the treatment of anem to the United Kingdom on July 26, 2012, to Italy on July 27, for the treatment of anemia in patients with lower-risk MDS, the treatment of anemia in patients with chronic kidney diseas Voluntary Harmonization Procedure on June 17, 2013. Sotate INDs.

Preclinical Studies

In preclinical studies, RAP-011 (the mouse equivalent of assess its biological effects. RAP-011 has been shown to incr hemoglobin and red blood cell counts in mouse models of β-t models. RAP-011 was also able to prevent chemotherapy-ind mouse model of chronic kidney disease. RAP-011 increased b in mice on bone lesions and bone metastases in a number of c

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multiple myeloma. The preclinical activity of sotatercept is al

ACE-536 Clinical and Preclinical Development

ACE-536 is a soluble receptor fusion protein consisting
to the Fc domain of human IgG1.

Ongoing Phase 2 Clinical Trials of ACE-536

We are conducting Phase 2 clinical trials of ACE-536 in
designation for ACE-536 for the treatment of β-thalassemia a

β-thalassemia. We are conducting a Phase 2 clinical tr
efficacy in patients with β-thalassemia. The dose levels to be
weeks for up to 85 days. Each cohort will include three to six
followed by an expansion phase at a selected dose level in up
types of transfusion-dependent patients, to increase the size o
ACE-536. The first patient in the trial was first dosed in Marc
are currently enrolling patients in the 0.8 mg/kg cohort. The p
hemoglobin of ≥1.5 g/dL from baseline for ≥14 days (in the a
≥20% reduction in red blood cell transfusion burden compare
will also examine the effects of ACE-536 on iron overload, a
endpoints include markers of serum iron and hemolysis. The
include additional sites in Europe and may enroll up to 72 pat

Initial data from this clinical trial is encouraging. As of J
treatment with ACE-536 show that non-transfusion dependen
hemoglobin of approximately 1.5 g/dL, while patients in the
approximately 0.0 and 0.8 g/dL, respectively. Based on these
establish a range of recommended ACE-536 dose levels. We
starting dose level and to undergo individualized dose titratio
appropriate hemoglobin level.

Based on currently projected timelines, which are subjec
data from the dose escalation portion of the clinical trial durin

MDS. We are conducting a Phase 2 clinical trial of AC
risk MDS. The dose levels to be studied are 0.125, 0.25, 0.5,
to 85 days. Each cohort will include three to six patients recei
an expansion phase at a selected dose level in up to 30 patient
completed enrollment in the 0.125, 0.25, 0.5, 0.75 and 1.0 mg
outcome measure is the proportion of patients who have an in

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baseline for 14 days in the absence of red blood cell transfusi
blood cell transfusions over a period of eight weeks compare
also examine the effects of ACE-536 on iron overload. The tr
patients. Based on currently projected timelines, which are su
available as follows: data from the dose escalation portion of
quarter of 2014.

Completed Phase 1 Clinical Trial

ACE-536 was studied in a double-blind, placebo-control
ACE-536 produced dose-dependent increases in hemoglobin
g/dL increased on a dose-dependent basis, with approximatel

Safety

In the completed Phase 1 clinical trial in healthy volunte
reported in the completed Phase 1 clinical trial. Commonly ob
bruising, injection site blemish, dry skin, numbness, muscle s
clinical trials, there have been no ACE-536 related serious ad
thalassemia trial who was treated at the 0.8 mg/kg dose level
dose reduction to 0.6 mg/kg for the second cycle and subsequ

ACE-536 Investigational New Drug (IND) Applic

ACE-536 is being studied in the United States under an
IND is for the treatment of anemia in patients with MDS. No
being studied in Europe under two separate Clinical Trial Ap
adult patients with β-thalassemia, submitted to Italy on Augus
is for a Phase 2 study for the treatment of anemia in patients v

Preclinical Studies

A number of preclinical pharmacology studies have beer
effects on red blood cells, hemoglobin and hematocrit. Collec
β-thalassemia, MDS, chemotherapy-induced anemia, acute bl

β-thalassemia. RAP-536 has been evaluated in a series
mutations in the β-globin genes, resulting in a deficiency of β
β-thalassemia patients, including severe anemia and the forma
severe complications common in patients with thalassemia, su
treatment improved

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numerous hematologic parameters, including significant incre
erythropoietin, normalized red blood cell size, and reduced re

Representative blood smears were taken from the β-thala
animals. As shown in the image below, RAP-536 improved re
red blood cells, and reducing the amount of cellular debris tha

Importantly, RAP-536 improved the maturation of later
concomitant reductions in the earlier-stage red blood cell prec
decreasing the formation of harmful hemichromes. It appears
promoting the removal of unpaired α-hemoglobin and stimula

This reduction in ineffective erythropoiesis reduced seve
deposition in organs, reduced spleen weights and normalized
model of β-thalassemia, we believe that it is modifying the di

MDS. In a mouse model of MDS, RAP-536 treated an
levels and hematocrit compared to controls. Additionally, RA
the ratio of red blood cell precursors to other cells in the bone

Sickle Cell Disease. We and Celgene are exploring the

Taken together, our clinical and preclinical results sugge

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Dalantercept

Inhibiting Angiogenesis to Limit Tumor Growth

Angiogenesis is a process by which new blood vessels a
followed by the maturation stage. During the proliferative sta
multiply in number and migrate to the site where a new vesse
which the endothelial cells coalesce to form tubes which are t
of the blood vessels resulting in fully formed, functional vess

Tumors depend on angiogenesis to form new blood vess
principal molecule driving the proliferative stage of angiogen
Inhibiting VEGF-driven angiogenesis to control tumor growth
several FDA-approved cancer drugs that inhibit the VEGF pa
these drugs, many patients fail to respond or develop resistanc
to inhibit angiogenesis by a different mechanism.

We are using our knowledge of the TGF-β superfamily t
maturation stage of angiogenesis. Recently, the activin recept
stage of angiogenesis. ALK1 is one of the 12 receptors for lig
importance of the ALK1 pathway in angiogenesis was discov
hemorrhagic telangiectasia 2 (HHT-2) in which patients mani
networks of small blood vessels that connect arteries to veins
that these patients have only one of two functional copies of t

We reasoned that leveraging the biology of the ALK1 pa
limiting the development of capillary beds within the tumor. T
have only one, rather than two copies, of the ALK1 gene. In r
vessel density in the tumor were reduced by half. These result
as a promising target for developing a new class of anti-angio

We believe one promising opportunity for dalantercept w
target distinct sequential steps in angiogenesis. Moreover, we
maturation are able to sensitize the tumor vasculature to the a
vessels become more resistant to VEGF pathway inhibitors as
dalantercept may maintain newly formed vessels in an immat

We and our academic collaborators have also shown in t
This is in contrast to VEGF pathway inhibitors that increase r

We believe that a combination of ALK1 and VEGF path
where VEGF pathway inhibitors are currently used. The curre
Nexavar® (sorafenib),

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Sutent® (sunitinib), Inlyta® (axitinib), and Votrient® (pazop
cell lung cancer, colorectal cancer, renal cell carcinoma and li

Non-Small Cell Lung Cancer (NSCLC). T
cancer in the United States in 2013 with 1
United States and $1.7 billion worldwide.

Colorectal Cancer. The National Cancer
in the United States in 2013 with 50,830 d
United States and $3.6 billion worldwide.

Renal Cell Carcinoma. The National Can
United States in 2013 with 13,680 deaths.
$800 million were anti-angiogenesis drug
Worldwide sales in 2012 of drugs for rena
VEGF pathway.

Liver Cancer. The National Cancer Instit
2013 with 21,670 deaths. The only drug a
inhibitor Nexavar®. In 2012, sales of Nex
worldwide.

Other Tumors. One or more anti-angioge
cancer and glioblastoma.

Developing Indications. It is believed tha
highly-vascularized cancers, including en
While no anti-angiogenesis agents are app
treatment of ovarian cancer.

The first two cancers for which we are studying the combinat
liver cancer. In renal cell cancer, sunitinib and axitinib are the
respectively. In the first line setting, sunitinib results in progr
patients whose disease had progressed despite receiving sunit
approximately 4.8 months. We believe the combination of da
of progression-free survival greater than axitinib alone. In live
yet the unmet medical need remains significant. In the first lin

Dalantercept Clinical and Preclinical Development

Dalantercept is comprised of the extracellular domain of
trap for ligands in the TGF-β superfamily that signal through
pursuing a program of ongoing and planned Phase 2 trials see
and activity of dalantercept in combination with approved VE

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Ongoing and Planned Phase 2 Clinical Trials of L

We are currently conducting two Phase 2 clinical trials o through collaborations with a National Cancer Institute funde overseeing an additional Phase 2 clinical trial in ovarian canc half of 2014. We plan to submit applications for orphan desig requirements for orphan status.

Acceleron Sponsored Clinical Trials

Squamous Cell Carcinoma of the Head and Neck. W dose trial in patients with recurrent or metastatic squamous ce October 2011. After an initial cohort of two patients treated a under the amended protocol in the first quarter of 2012 to stu protocol was subsequently amended to increase the dose leve disease progression (either clinically or as measured by analy longer tolerated. The primary outcome measure is objective r outcome measures of tumor response. The trial is being condu with a total of 46 patients, including two patients treated at th patients, 41 patients (one patient at 80 mg, 13 patients at 0.6 m according to RECIST criteria as of December 20, 2013. The p patients (23%) at 0.6 mg/kg and ten patients (37%) at 1.2 mg/ and, at the 1.2 mg/kg dose level, one patient (2.4%) achieved preliminary data suggest dalantercept has dose dependent but the head and neck. We believe the greatest potential for dalan with cytotoxic chemotherapy.

Renal Cell Carcinoma. We are conducting a two-part VEGF pathway inhibitor, in patients with advanced renal cell expansion stage with the primary endpoint of evaluating the s axitinib to select a dose level of dalantercept (in combination the dose escalation stage were 0.6, 0.9, and 1.2 mg/kg given s 0.9 and 1.2 mg/kg dose levels were four, four and five patient phase and we are now enrolling up to 20 additional patients in Patients continue to receive dalantercept and axitinib until the the combination is no longer tolerated. Up to a total of 44 pati of the trial will be a randomized comparison of the selected d 112 patients. The primary endpoint of part two of the trial wil United States.

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We believe that early preliminary data from this trial are assessment period for each dose cohort. Of the 13 patients en therapy and six (46%) had received ≥ 2 prior therapies, includ 2013, six of eleven (55%) evaluable patients completed ≥ 6 c 0.6 mg/kg dose level, two of four patients at the 0.9 mg/kg do preliminary evidence that dalantercept can be safely combine As of the most recent analysis (August 28, 2013) of tumor res achieved a partial response and one patient had achieved stab response and three patients had achieved stable disease at the been analyzed.

Based on currently projected timelines, which are subjec or the beginning of the second quarter of 2014, which, if succ data to be available when we initiate part two of the trial.

Hepatocellular Carcinoma

In the first half of 2014, we plan to initiate a Phase 2 sin with sorafenib, an approved VEGF pathway inhibitor, in patie safety and tolerability of various dose levels of dalantercept i progression, progression-free survival, disease control rate, a subcutaneously once every three weeks in combination with 4 once every three weeks in combination with 400 mg sorafenib three weeks in combination with 400 mg sorafenib given twic during the dose escalation phase, followed by an expansion p and sorafenib until there is disease progression (either clinica

Gynecologic Oncology Group (GOG) Sponsored T

The Gynecologic Oncology Group, one of the National C 2 clinical trials to study the activity of dalantercept at a dose l weeks. The first trial was in patients with recurrent or persiste ovarian cancer. Both of these clinical trials were designed as endpoints: RECIST-defined response rate or progression free additional patients will be enrolled in the second, expanded p 28 patients, 16 (57.1%) achieved stable disease and 5 (17.9%) alive and progression free without receiving non-protocol the commonly reported toxicities regardless of attribution. The G in the second part of the endometrial cancer trial. The GOG o

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anticipate that in the middle of 2014, we may receive notifica
second part of the ovarian cancer trial.

Phase 1 Trial Results

A Phase 1 ascending dose trial evaluated the safety, tole
advanced solid tumors. Dalantercept was given subcutaneous
patients were enrolled in dose groups at 0.1, 0.2, 0.4, 0.8, 1.6,
on decreases or stabilization of tumor size. As shown in the fi
and 13 (45%) had stable disease according to RECIST criteria
least three months. Treatment continued until the patient expe

The figure below displays each patient's best overall resp
each patient received is shown below their bar.

Best Overall Response by the Maximum Percent C

In addition to these effects on tumor size, dalantercept d
metabolic activity as well as decreases in tumor blood flow. I
to those in HHT-2 patients, suggesting ALK1 pathway inhibi

Safety

In clinical trials to date, dalantercept has been generally
patients out of 37 experienced serious adverse events deemed
overload, and

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congestive heart failure. Two of these patients had prior coron
managed with diuretics. As of December 24, 2013, the follow
trials. Two patients in the head and neck cancer clinical trial h
were determined to be possibly related to dalantercept. Anoth
tracheal obstruction and pulmonary edema that were determin
endometrial cancer, seven patients have experienced treatmen
cavity, fluid accumulation around the lungs, rectal fistula, gas
patients with ovarian cancer, one patient has experienced trea
potassium), anorexia, dehydration and increased creatinine. In
adverse events. Adverse events associated with axitinib did no

Dalantercept Investigational New Drug (IND) App

Dalantercept is being studied in the United States under
with advanced solid tumors or multiple myeloma. Dalanterce
Gynecologic Oncology Group: the first was submitted on Aug
second submitted on September 25, 2012 for the treatment of

Preclinical Studies

We have demonstrated that dalantercept as a single agen
Importantly, we have shown that dalantercept is a potent inhi
inhibitors that target the proliferative stage of angiogenesis.

We also demonstrated that dalantercept in combination w
bearing human renal cell carcinoma xenografts, we and our a
dalantercept and sunitinib, a VEGF-receptor tyrosine kinase i
model of human renal cell carcinoma that develops resistance

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growth was blocked by the simultaneous administration of da

Dalantercept/Sunitinib Combination
Exceeds Activity of Either Alone
(Mouse Model of Renal Cell Carcinoma (A498))

Collaboration with Drs. Wang, Bhatt,

Development Objectives

For sotatercept and ACE-536, our development strategy, conduct similar clinical trials with each protein therapeutic ca review the data from both studies and determine which, if eith It is our goal to initiate the Phase 3 clinical trials for one or bo or early 2015.

In addition, we and Celgene are performing preclinical r blood cell disorders known as hemoglobinopathies, which inc encouraging preclinical and clinical data in β-thalassemia and therapeutic candidates, we believe there is a potential for activ underway.

For dalantercept, our development strategy is to continue compares the combination of dalantercept and axitinib to axit 2014. We will also work toward completion of the ongoing si half of 2014, at least one additional trial of dalantercept in can currently considering trials of dalantercept in combination wi lung cancer in combination with chemotherapy and/or a VEG

Our Preclinical Pipeline

We are using our discovery platform and knowledge of t candidates that inhibit ligands of the TGF-β superfamily.

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We have preclinical stage protein therapeutic candidates in ou

inhibition of liver fibrosis in mouse mode

improvement of cardiovascular function i

improvement in diseases of the eye such a
degeneration (AMD).

ACE-083

We are developing a novel protein therapeutic candidate
2014. ACE-083 acts as a trap for ligands in the TGF-β superf
these ligands, ACE-083 can increase muscle mass, as we have
muscles in which the drug is injected. In preclinical animal st
muscles but no systemic increases in muscle mass. We are foc
and function of specific muscles may provide a clinical benef
disuse atrophy.

ACE-083 S
Injected Mus

**

p<0.05 vs. PBS (placebo) & vs. non-injected leg

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ALK1 Pathway Inhibitors for the Treatment of Dis

Although VEGF pathway inhibitors are the standard of c
therapies. Perivascular cell coverage may protect endothelial
the number of perivascular cells, the activity of VEGF pathwa
genetic evidence indicates that patients with hereditary hemor
defective vasculature with reduced perivascular cell coverage
the treatment of diseases of the eye. The combination of a VE
treatment of neoangiogenesis diseases of the eye including AI

Our Strategic Partnerships

Collaborations with corporate partners have provided us
regulatory and commercial capabilities. We have received mo

Celgene

On February 20, 2008 we entered into an agreement, wh
which we granted to Celgene worldwide rights to sotatercept.
which we refer to as the ACE-536 Agreement under which w
of the Sotatercept Agreement. These agreements provide Celg
well as exclusive rights to obtain a license to certain future co

Sotatercept Agreement. Under the terms of the Sotater
commercialization of sotatercept. We also granted Celgene ar
Celgene paid $45.0 million and bought $5.0 million of equity
have received $34.5 million in research and development fun

We retained responsibility for research, development thr
supplies for these trials. These activities are substantially com
chronic kidney disease and will be responsible for any future
are eligible to receive future development, regulatory and con
additional $348.0 million for each of the three discovery stage
achieve payment of a milestone, nor do we expect any such m

ACE-536 Agreement. Under the terms of the ACE-536
commercialization of ACE-536. We also granted Celgene an
application for the treatment of anemia. Celgene paid $25.0 m
September 30, 2013, we have received $28.3 million in resear

Under this agreement, we retained responsibility for rese
trials in MDS and β-thalassemia, as well as

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manufacturing the clinical supplies for these studies. Celgene manufacture ACE-536 for all Phase 1 and Phase 2 clinical tria Phase 3 clinical trials and commercial supplies. We are eligib $200.0 million for the ACE-536 program.

Both Agreements. Under each agreement, the conduct Commercialization Committee. Other than with respect to cer committee, the resolution of the relevant issue is determined b costs under the Sotatercept and ACE-536 Agreements. As of development costs for both programs. Celgene will be respon sotatercept, ACE-536 and future products, in each case if app related thereto. We will receive tiered royalties in the low-to- sotatercept and ACE-536 are the same. Celgene is obligated t ACE-536. Celgene may determine that it is commercially rea the development or commercialization of the other protein the reasonable to continue development of one or both of sotaterc the discontinued candidate or candidates ourselves. The agree or by Celgene for convenience on a country by country or pro in its entirety or on a product by product basis, for failure of a us or termination by Celgene for convenience or failure to me termination for cause by Celgene will have the effect of reduc

Other Collaborations

Alkermes. On December 3, 2009, we entered into a C technology platform for extending the circulating half-life of rights to apply this technology to proteins outside of the TGF- development, regulatory and sales milestones and mid-single Alkermes using this technology. To our knowledge, Alkerme

Shire. On September 8, 2010, we entered into an agree a clinical stage protein therapeutic candidate. We granted Shi agreement, Shire made an upfront cash payment of $45.0 mil during the term of the agreement. In April 2013, we and Shire terminated our collaboration agreement, effective as of June 3 development of ACE-031.

Competition

The development and commercialization of new drugs is all protein therapeutics we may develop or

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commercialize in the future from pharmaceutical and biotech
potentially competing products have significantly greater fina
manufacturing, preclinical testing, conducting clinical trials,
reduced or eliminated if our competitors develop and comme
convenient or are less expensive than any products that we m

If our clinical stage protein therapeutics are approved, th
the following indications, and potentially with drug candidate

β-thalassemia

If either sotatercept or ACE-536 is approved for the treat

Red blood cell transfusions and iron chela
aware that Shire is studying a new oral iro

Fetal hemoglobin stimulating agents, such
cell disease, are sometimes used to treat p
agent being developed by HemaQuest Ph
sponsored Phase 2 clinical trial in patients

Hematopoietic stem cell transplant treatm
sufficiently well-matched source of donor
improvements to this approach.

Other therapies in development, including
bio, Inc., Memorial Sloan Kettering Canc
with Biogen Idec.

MDS

If either sotatercept or ACE-536 is approved for the treat

Recombinant erythropoietin and other ery
anemia in MDS, current practice guidelin
stimulating factor agents (G-CSF) to treat
Aranesp®, is currently in Phase 3 clinical

Red blood cell transfusion and iron chelat
MDS.

Immunomodulators, including Celgene's
MDS patients.

Other therapies in development, including
developed by Celgene to treat patients wi
which is currently in Phase 3

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clinical trials in the United States and Eur
MDS.

Chronic Kidney Disease

If either sotatercept or ACE-536 is approved for the treat
with erythropoiesis stimulating agents that have been approve
Medicaid Services (CMS) changed the reimbursement practic
dialysis, which has led to changes in the way erythropoiesis s
patients treated with erythropoiesis stimulating agents as well
anticipated future introduction of biosimilar erythropoiesis sti
Additionally, we are aware that Astellas Pharma and Fibroger
erythropoietin to treat patients with anemia.

Oncology Therapies

We are developing dalantercept to be used in combinatio
approved, it would compete with:

Other non-VEGF angiogenesis inhibitors
inhibitors or used independently of VEGF

OncoMed Pharmaceuticals, Pfizer and Tr

Pfizer's fully human monoclonal antibody
mesothelioma.

In addition to the therapies mentioned above, there are m
various types of cancer, including renal cell carcinoma, head

Therapies for Treating Muscle Loss

We are in the process of moving our lead pre-clinical pro
develop ACE-083 for the treatment of neuromuscular disorde
other approaches to treating muscle loss that are in clinical tri
targeting the activin receptor type IIB (ActRIIB), in various p
Children's Hospital, in collaboration with The Myositis Assoc
of a gene therapy delivery of follistatin (FS344) to muscle in
myositis (sIBM). Eli Lilly is developing, LY2495655, a myos
cancer-related cachexia. Regeneron and Sanofi are developing
clinical development for treatment of sarcopenia. Biogen Idec
the tumor necrosis factor (TNF)-like weak inducer of apoptos
Atara Bio is developing PINTA 745, a myostatin inhibiting p
are on dialysis.

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The key competitive factors affecting the success of any
and level of promotional activity.

Commercialization

We retain co-promotion rights with our collaboration pa
terms of our agreements with Celgene, our commercializatio
commercialization rights for our oncology protein therapeutic
We intend to build hematology, oncology and neuromuscular
markets to effectively support the commercialization of these
target key prescribing physicians in these areas. We currently
required capabilities within an appropriate time frame ahead
are not able to establish sales and marketing capabilities or ar
through collaborations with Celgene, any future product reve

Intellectual Property

Our commercial success depends in part on our ability to
biological discoveries, screening and drug development techn
prevent others from infringing our proprietary rights. Our pol
U.S. and foreign patent applications related to our proprietary
and implementation of our business. We also rely on trade se
opportunities to develop and maintain our proprietary positio
United States, Europe and other countries that relate to the re
provide periods of non-patent-based exclusivity for qualifying

Our patenting strategy is focused on our protein therapeu
protein in key therapeutic areas. We also seek patent protectio
for targeted patient populations. We have sought patent prote
agreements.

Our patent estate, on a worldwide basis, includes approx
pending and issued claims relating to all of our current clinica
these, approximately 20 issued patents cover the nine recepto
discovery approach. These figures include in-licensed patents

Individual patents extend for varying periods of time dep
and the legal term of patents in the countries in which they ar
effective for twenty years from the earliest non-provisional fi
a portion of the term effectively lost as a result of the FDA re
years and the total

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patent term including the restoration period must not exceed
accordance with provisions of applicable local law, but typica
with respect to our receptor-focused platform will expire on d
with respect to our protein therapeutic candidates will expire
However, the actual protection afforded by a patent varies on
factors, including the type of patent, the scope of its coverage
particular country and the validity and enforceability of the pa

National and international patent laws concerning protei
patent-eligibility or the breadth of claims allowed in such pat
either the patent laws or in interpretations of patent laws in th
and enforce our intellectual property rights. Accordingly, we
patents or in third-party patents. The biotechnology and pharm
other intellectual property rights. Our ability to maintain and
success in obtaining effective claims and enforcing those clai
may file or license from third parties will result in the issuanc
be challenged, invalidated or circumvented, and the rights gra
competitive advantages against competitors with similar techn
commercialize similar drugs or duplicate our technology, bus
time required for clinical development and regulatory review
commercialized, any related patent may expire or remain in fo
advantage of any such patent. The patent positions for our mo

Sotatercept Patent Coverage

We hold two issued patents covering the sotatercept com
most countries of the European Patent Convention) and additi
including Japan, China, South Korea, Brazil, Mexico, Russia,
patents is 2026 plus any extensions of term available under na

We hold two issued patents covering the treatment of an
or pending in many other major jurisdictions worldwide, inclu
The expected expiration date for these composition of matter

We also hold patents and patent applications directed to
in multiple myeloma.

ACE-536 Patent Coverage

We hold two issued patents covering the ACE-536 comp
many other major jurisdictions worldwide, including Europe,

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Japan, China, South Korea, Brazil, Mexico, Russia and India.
2029, exclusive of possible patent term extensions.

We hold one issued patent covering the treatment of ane
pending in other major jurisdictions worldwide, including Eu
expiration date for these method of treatment patents is 2029

Dalantercept Patent Coverage

We hold one issued patent covering the dalantercept con
exclusive of possible patent term extensions, and we hold add
patent applications covering composition of matter in many o
Brazil, Mexico, Russia and India. The expected expiration da
are either 2027 or 2029, exclusive of possible patent term ext

We hold one issued patent covering the treatment of tum
patents issued or pending in other major jurisdictions worldw
The expected expiration date for these method of treatment pa

We also hold patent applications directed to a variety of
combination of dalantercept and a VEGF-targeted tyrosine ki
Israel Deaconess Medical Center, or BIDMC, and we have se
these patent applications, should they issue as patents, is 203

Trade Secrets

In addition to patents, we rely upon unpatented trade sec
maintain our competitive position. We seek to protect our pro
partners, collaborators, employees and consultants and invent
protect our proprietary information and, in the case of the inv
developed through a relationship with a third party. These agr
In addition, our trade secrets may otherwise become known o
partners, collaborators, employees and consultants use intelle
rights in related or resulting know-how and inventions.

In-Licenses

Effective June 21, 2012, we entered into a license agreer
worldwide, exclusive rights under patent filings jointly invent
by combination therapy with dalantercept and VEGF-recepto
U.S. patent filing and one pending PCT (international) patent
BIDMC retained rights, on behalf of itself and other non-prof

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non-profit purposes. The license rights granted to us are furth
rights due to its sponsorship of research that led to the creatio
milestone payments aggregating up to $1.0 million. In additio
net product sales of drug labeled for treatment regimens that a
the last valid claim of the licensed patent rights. We may term
agreement may also be terminated by BIDMC in the event of
or similar circumstances. In any termination event, we retain
right to sublicense.

In August 6, 2010, we entered into an amended and resta
obtain worldwide, exclusive rights under patent filings solely
LICR-owned patent rights relate to the first cloning of the typ
claims to nucleic acids, proteins and antibodies with respect t
2018. The license excludes the rights with regard to anti-ALK
with dalantercept and, if issued, such patent rights are expecte
and other non-profit academic institutions, to practice under t
development and sales milestone payments aggregating up to
the low single-digits on worldwide net product sales of produ
reduced rate for eight years after patent expiration. If we subl
revenue, excluding payments based on the level of sales, prof
expiration of royalty obligations. We may terminate the agree
be terminated by LICR in the event of a material breach by us
circumstances. In any termination we retain our joint ownersh

In August 2010, we entered into two amended and restat
providing rights under U.S. patent filings solely owned by Sa
type II activin receptors, human ActRIIA and frog ActRIIB, r
with respect to each of the foregoing. These patent rights expi
and sotatercept; the other agreement relates to ActRIIB, ACE
to the therapeutic products that are covered by the patents and
using the Salk patent rights. If we sublicense the Salk patent r
based on sales. Under the agreements, Salk retained rights, or
licensed rights for non-profit purposes. We agreed to pay Sall
sotatercept and $0.7 million for ACE-536. In addition, we are
sales by us or our sublicensees of products claimed in the lice
obligations continuing at a reduced rate for a period of time a
obligations. We may terminate either agreement at any time b

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may also be terminated by Salk in the event of a material brea

Government Regulation

The preclinical studies and clinical testing, manufacture, sales, among other things, of our protein therapeutic candidat authorities in the United States and other countries. In the Un Food, Drug, and Cosmetic Act and other laws, including, in t ACE-536, and dalantercept to be regulated by the FDA as bio as proteins intended for therapeutic use. Protein therapeutics the FDA prior to being marketed in the U.S. Manufacturers o FDA requirements, both before and after product approval, m administrative or judicial sanctions, including FDA refusal to partial suspension of production or distribution, fines and/or c

The steps required before a biologic may be approved fo

completion of preclinical laboratory tests, Practices, or GLPs, and other applicable r

submission to the FDA of an Investigatio clinical trials may commence;

completion of adequate and well-controll establish that the biological product is "sa for a chemical drug product for its intend

submission to the FDA of a BLA;

satisfactory completion of an FDA pre-ap produced to assess compliance with appli

FDA review of the BLA and issuance of a

Preclinical studies include laboratory evaluation of produ potential safety and efficacy of the biologic candidate. Preclin GLPs. The results of the preclinical tests, together with manu IND. Some preclinical testing may continue even after the IN will also include a protocol detailing, among other things, the the effectiveness criteria to be evaluated if the first phase or p will automatically become effective 30 days after receipt by t hold because of its concerns about the drug candidate or the c sponsor and the FDA must resolve any outstanding concerns

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All clinical trials must be conducted under the supervisio
must be conducted under protocols detailing the objectives of
exclusion criteria and the safety and effectiveness criteria to b
progress reports detailing the status of the clinical trials must
serious and unexpected adverse reactions, any clinically impo
the protocol or investigator's brochure, or any findings from c
exposed to the drug. An institutional review board, or IRB, at
protocol before a clinical trial commences at that institution, a
provided to each research subject or the subject's legal repres

Clinical trials are typically conducted in three sequential
same drug candidate within the same phase of development in
limited number of patients, but are usually conducted in healt
appropriate, for absorption, metabolism, distribution, excretio

Phase 2 usually involves trials in a larger, but still limite
specific, targeted indications to determine dosage tolerance an
risks.

Phase 3 trials are undertaken to further evaluate clinical
patient population at geographically dispersed clinical trial sit
any specific time period, if at all, with respect to any of our pr
results from later trials. Furthermore, the FDA or the sponsor
the subjects or patients are being exposed to an unacceptable
its institution if the clinical trial is not being conducted in acc
with unexpected serious harm to patients.

The results of the preclinical studies and clinical trials, to
and composition of the product, are submitted to the FDA as p
indication. Under the Prescription Drug User Fee Act, as re-a
BLA, as well as annual fees for commercial manufacturing es
application that requires clinical data, such as a BLA, for the
certain limited deferrals, waivers, and reductions that may be
for approval is reviewed for administrative completeness and
BLA is found complete, the FDA will file the BLA, triggering
incomplete or not properly reviewable at the time of submissi
within six months after the application is accepted for filing a
whereupon a review decision is to be made. The FDA, howev
goals are subject to change from time to time. Further, the out

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but a "complete response letter" that describes additional wor
BLA, the FDA may inspect the facility or facilities at which t
complies with cGMPs. The FDA may deny approval of a BL
additional testing or information, which can extend the review
granted. If a product is approved, the approval may impose li
warning statements be included in the product labeling, may r
approval, and may impose restrictions and conditions on prod
Mitigation Strategy, or REMS, or otherwise limit the scope o
product may be marketed for other uses or before certain mar
surveillance to monitor the safety or efficacy of a product is r
standards is not maintained or if safety or manufacturing prob
may be established that could delay or prevent regulatory app

As part of the recently-enacted Patient Protection and Af
Innovation Act of 2009, or the BPCI, a statutory pathway has
and possibly interchangeable with, earlier biological products
manufacturers of original reference biological products are gr
the United States. The objectives of the BPCI are conceptuall
1984, commonly referred to as the "Hatch-Waxman Act", wh
implementation of an abbreviated approval pathway for biolo
late 2010, the FDA held a hearing to receive comments from
hearing in 2010, the FDA, in February 2012 and February 20
scientific, quality and procedural issues relevant to an abbrevi
biosimilar to one of our products could have a material advers
and may be priced significantly lower than our products.

Both before and after the FDA approves a product, the m
comprehensive regulatory oversight. For example, quality co
requirements, and the FDA periodically inspects manufacturi
continue to spend time, money and effort to maintain cGMP c

Orphan Drug Act

The Orphan Drug Act provides incentives to manufactur
than 200,000 persons in the United States at the time of appli
before submitting a BLA. Orphan drug designation does not c
approval process. If a product that has orphan drug designatio
designation, the holder of the approval is entitled to a seven-y
limited circumstances. For example, a drug that the FDA cons

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superior to, or different from, another approved orphan drug,
during the seven-year exclusive marketing period. In addition
sufficient quantities of their orphan drugs to meet the needs o
for the drug. ACE-536 has orphan drug designation in the Un
FDA has granted orphan designation for sotatercept for the tr

Legislation similar to the Orphan Drug Act has been ena
available for therapies addressing chronic debilitating or life-
financially not viable to develop. The market exclusivity peri
the fifth year, available evidence establishes that the product
market exclusivity may be extended to 12 years if sponsors c
the EMA.

Expedited Review and Approval

The FDA has various programs, including Fast Track, pr
the process for reviewing drugs, and/or provide for the appro
more of these programs, the FDA may later decide that the dr
review or approval will be shortened. Generally, drugs that ar
those with the potential to address unmet medical needs and t
Track is a process designed to facilitate the development and
conditions and fill unmet medical needs. Priority review is de
where no adequate therapy exists an initial review within six
and priority review do not affect the standards for approval, t
Fast Track designated drug and expedite review of the applica
earlier approval for a new drug that is intended to treat a serio
based on a surrogate endpoint. A surrogate endpoint is a labo
representing a clinically meaningful outcome. As a condition
accelerated approval perform post-marketing clinical trials to
trial.

In the Food and Drug Administration Safety and Innovat
the FDA to utilize innovative and flexible approaches to the a
issue related draft guidance within a year after the law's enact
published a draft Guidance for Industry entitled, "Expedited P
FDA programs that are intended to facilitate and expedite dev
to concluding that a drug is a candidate for these expedited de
and priority review programs discussed above, the FDA also
request for Breakthrough Therapy designation should be subm

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as an amendment to an IND. FDA has already granted this de
Therapy designated drugs.

Pediatric Exclusivity and Pediatric Use

Under the Best Pharmaceuticals for Children Act, or BP
submits information requested in writing by the FDA, or a W
FDA may not issue a Written Request for studies on unappro
use of a drug in a pediatric population, or part of the pediatric

We have not received a Written Request for such pediatr
in the future. To receive the six-month pediatric market exclu
requested studies in accordance with a written agreement wit
accepted scientific principles, and submit reports of the studie
the labeling if the FDA determines that such information will
that the studies were conducted in accordance with and are re
as appropriate, and that the reports comply with the FDA's fil

In addition, the Pediatric Research Equity Act, or PREA
new active ingredient, new indication, new dosage form, new
BLAs and supplements thereto must contain a pediatric asses
must include the evaluation of the safety and effectiveness of
support dosing and administration for each pediatric subpopu
a deferral of pediatric studies for some or all of the pediatric s
that the drug or biologic is ready for approval for use in adult
needs to be collected before the pediatric studies begin. After
submit the required assessment, keep a deferral current or fail

As part of the FDASIA, Congress made a few revisions
both laws permanent.

Reimbursement

In both domestic and foreign markets, sales and reimbur
costs of such products will be covered by third-party payors,
organizations. These third-party payors are increasingly chall
to manage costs. The containment of healthcare costs has bec
focus in this effort. Governments have shown significant inte
restrictions on reimbursement and requirements for substituti
and adoption of more restrictive policies in jurisdictions with
addition, there is significant uncertainty regarding the reimbu

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healthcare products. We may need to conduct expensive phar
products. If third-party payors do not consider our products to
products after approved as a benefit under their plans or, if th
a profitable basis.

Within the United States, if we obtain appropriate appro
seek approval and coverage for those products under Medicai
and also seek to sell the products to federal agencies.

Medicaid is a joint federal and state program that is adm
Medicaid Drug Rebate Program, manufacturers are required t
The amount of the rebate for each product is set by law and m
inflation.

Medicare is a federal program administered by the federa
disabilities. Medicare Part D provides coverage to enrolled M
administered by a physician). Medicare Part D is administere
plan establishes its own Medicare Part D formulary for prescr
time-to-time.

Medicare Part B covers most injectable drugs given in a
hospital outpatient departments and doctors offices. Medicare
have the responsibility of making coverage decisions. Subject
covered drugs based on a percentage of manufacturer-reporte

Drug products are subject to discounted pricing when pu
participation is required for a drug product to be covered and
Part B and the PHS pharmaceutical pricing program. FSS pric
is intended to not exceed the price that a manufacturer charge
purchased by the Veterans Administration, Department of De
TRICARE retail pharmacy program), Coast Guard, and PHS
subject to an additional discount if pricing increases more tha

To maintain coverage of drugs under the Medicaid Drug
purchasers under the PHS pharmaceutical pricing program. P
of financially needy patients, community health clinics and ot

The American Recovery and Reinvestment Act of 2009
different treatments for the same illness. A plan for the resear
for Healthcare Research and Quality and the National Institut
expenditures will be made to Congress. Although the results
policies for public or private

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payors, it is not clear what effect, if any, the research will hav
to treat is the subject of a study. It is also possible that compa
adversely affect the sales of any of our approved protein thera
compared to other available therapies, they may not cover our
be sufficient to allow us to sell our products on a profitable ba

The United States and state governments continue to pro
the United States Congress enacted the Patient Protection and
includes changes to the coverage and payment for drug produ
federal or state level could further limit reimbursement for ph

Outside the United States, ensuring adequate coverage a
pharmaceuticals is subject to governmental control in many c
the receipt of regulatory marketing approval for a product and
our protein therapeutic candidates or products to other availab
delays in our commercialization efforts. Third-party payors ar
third-party payors limit reimbursement for newly-approved h
are also causing governments to consider or implement variou
rebates. If budget pressures continue, governments may imple
the price we might establish for products that we may develop
There can be no assurance that any country that has price con
reimbursement and pricing arrangements for any of our produ

Foreign Regulation

In addition to regulations in the United States, we will be
sales and distribution of our protein therapeutic candidates. W
obtain approval from the comparable regulatory authorities of
commence clinical trials or market products in those countries
trials, product licensing, pricing and reimbursement vary grea
FDA approval.

Certain countries outside of the United States have a pro
prior to the commencement of human clinical trials. In Europ
competent national health authority and to independent ethics
Once the CTA is approved in accordance with a country's req
clinical trials must be conducted in accordance with good clin

Under European Union regulatory systems, a company m
decentralized procedure. The centralized procedure is compul
containing

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new active substances for specific indications such as the trea
designated orphan medicines, and optional for other medicine
application is submitted to the European Medicines Agency w
and a favorable opinion typically results in the grant by the E
European Union member states within 67 days of receipt of th
renewed is usually valid for an unlimited period. The decentra
based on an assessment of an application performed by one m
approval procedure, an applicant submits an application, or de
states. The reference member state prepares a draft assessmen
application. Within 90 days of receiving the reference membe
approve the assessment report and related materials. If a mem
eventually referred to the European Commission, whose decis

As in the United States, we may apply for designation of
European Union before the application for marketing authoriz
including up to 10 years of market exclusivity for the approve
effective or otherwise clinically superior to the orphan design

Additional Regulation

We are also subject to regulation under the Occupational
Control Act, the Resource Conservation and Recovery Act an
govern our use, handling and disposal of various biological an
and development involves the controlled use of hazardous ma
handling and disposing of such materials comply with the stan
contamination or injury from these materials cannot be compl
damages that result and any such liability could exceed our re

There have been a number of federal and state proposals
products, government control and other changes to the healthc
what actions federal, state or private payers for medical goods
legislation. We cannot predict the effect medical or healthcare
reforms will not have a material adverse effect.

Manufacturing

We currently manufacture drug substance for our preclin
dalantercept. We manufacture material compliant to U.S. and
corporate headquarters in Cambridge, Massachusetts. We hav
and other protein therapeutics.

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Our manufacturing facility is based on single use, dispos
production process, minimizing the need for cleaning and ste
consists of four independent clean rooms totaling 4,000 squar
and has space for two additional 1,000 liter bioreactors.

Approximately 20 fulltime employees focus on our proc
investment in manufacturing capabilities allows us to advance
portfolio flexibility than if we used a contract manufacturer. T
retain control over the process and provides an ability to balan
before clinical data are available.

Our manufacturing capabilities encompass the full manu
integrated with our project teams from discovery through dev
molecules into manufacturing. We have designed our manufa
for the manufacture of different protein therapeutic candidate

We manufacture our protein therapeutic candidates using
based on a standardized process modified for each of our prot
hamster ovary cells that have been genetically engineered to p
using industry standard methods, which include affinity chron
have been successfully transferred to commercial facilities ba
characterization on sotatercept between our Phase 2 material a

We believe that we can scale our manufacturing process
of our protein therapeutic candidates. For our early phase pro
preclinical testing and Phase 1 and Phase 2 clinical developm
intend to transfer the process for Phase 3 production to Celge
transferred the manufacturing process for sotatercept to Celge
commercial supply of sotatercept and ACE-536. We intend to
clinical trials.

Employees

As of September 30, 2013, we had 78 full-time employe
whom have Ph.D. or M.D. degrees. We have no collective ba
stoppages. We consider our relations with our employees to b

Facilities

Our corporate, research and development, manufacturing
approximately 94,500 square feet of office and laboratory spa
approximately $0.4 million. We have sublet approximately 20

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in September 2018 and one lease expires in May 2015. We be
substitute space would be available if needed.

Legal Proceedings

On October 18, 2012, the Salk Institute for Biological St
Court for Suffolk County, alleging that we breached one of ou
us with a license with respect to certain of Salk's U.S. patents
licensing agreement, we owed Salk a greater share of the upfr
regarding ACE-031 and a share of the upfront payment and d
collaboration agreement with Celgene regarding ACE-536. Sa
15% share of future development milestone payments receive
additional amounts are due to Salk and that we have complied

We moved to dismiss the complaint on December 3, 201
Acceleron answered the complaint and asserted patent invalid
action on March 28, 2013 to the United States District Court f
stipulation as to certain patent issues raised in the action, and
conference on May 30, 2013, and the parties are in the proces
intend to defend our position vigorously.

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Executive Officers, Significant Employees and Directors

Below is a list of the names, ages as of January 1, 2014 a
serve as our executive officers and directors as of the date of
directors will be divided into three class of directors, with the
below serves in the class indicated. Subject to any earlier resi
incorporation and by-laws, our Class I directors will serve un
the 2015 annual meeting of stockholders; and our Class III di

Name	Age	
John L. Knopf, Ph.D.	61	Chief Exec
Kevin F. McLaughlin	57	Senior Vic
Matthew L. Sherman, M.D.	58	Senior Vic
Steven D. Ertel	44	Senior Vic
Ravindra Kumar, Ph.D.	53	Vice Presi
John D. Quisel, J.D., Ph.D.	42	Vice Presi
Anthony B. Evnin, Ph.D.	72	Director (C
Jean M. George	55	Director (C
George Golumbeski, Ph.D.	56	Director (C
Edwin M. Kania, Jr.	56	Director (C
Tom Maniatis, Ph.D.	70	Director (C
Terrance G. McGuire	57	Director (C
Richard F. Pops	51	Director (C
Joseph S. Zakrzewski	51	Director (C

John L. Knopf, Ph.D. co-founded Acceleron in 2003 an
directors from 2003 to 2004, and has served from 2007 to the
Research facilities in Cambridge, MA and Vice President of M
Institute (GI) from 1982 to 1998, where he participated in the
for hemophilia, recombinant factor VIII *Recombinate*® and h
established a structure-based small molecule discovery group
transduction, and is named as an inventor of several patents. I
biology at SUNY Buffalo. We believe Dr. Knopf's extensive
serve as a member of our board of directors.

Kevin F. McLaughlin joined Acceleron in November 2
most recently served, from 2009 through 2010, as Senior Vice
Aptius Education, Inc. and from 2007 through 2009 he worke
Mr. McLaughlin held several executive positions with PRAE
where he had responsibility for private financings, partnershi
Later, Mr. McLaughlin became COO, and then President and
responsible for negotiating the sale of the company to GlaxoS
Computervision

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Corporation. Mr. McLaughlin received a BS in business from

Matthew L. Sherman, M.D. joined Acceleron in May 2 served as Senior Vice President and Chief Medical Officer at operations, biostatistics, data management, regulatory affairs, Genetics Institute and Wyeth Pharmaceuticals in various capa Dr. Sherman provided senior oncology and hematology leade therapeutics, including the submission and approval of Mylot of oncology and clinical development and is named as an inv Internal Medicine and held various clinical positions at Harva Cancer Institute and Brigham and Women's Hospital. Dr. She and an MD from Dartmouth Medical School.

Steven D. Ertel joined Acceleron in January 2006 and is business development function and currently leads our busine has over 20 years of experience in the biotechnology industry these companies included program management for preclinica market launch of a novel biologic agent, and business develop Bioscience Partners. Mr. Ertel received a BSE in biomedical University of Pennsylvania.

Ravindra Kumar, Ph.D. joined Acceleron in March 20 established and currently leads our discovery research. Previo Pharmaceuticals. At Genetics Institute, Dr. Kumar was a key biology. Following the integration of discovery functions fro Biological Chemistry group. Dr. Kumar is the author of sever inventor of several patents. Dr. Kumar received his BS in che his Ph.D. from University of New Brunswick and he complet NY.

John D. Quisel, J.D., Ph.D. joined Acceleron in Octobe joining us, Dr. Quisel worked at the Boston office of Ropes & law firms, Dr. Quisel has, through strategic in-licensing and p platform focused intellectual property portfolios for numerou aspects of biotechnology law, including the negotiation of int prosecution and litigation. Dr. Quisel received an AB in biolo biology from the Massachusetts Institute of Technology and a

Anthony B. Evnin, Ph.D. has served as a member of ou firm, where he focuses largely on life sciences investments ar manager of

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business development at Story Chemical Corporation and a re
boards of AVEO Pharmaceuticals, Infinity Pharmaceuticals, I
five years, Dr. Evnin served as a director of Altea Therapeuti
Inc., Icagen, Inc., Memory Pharmaceuticals Corp., Pharmos C
Rockefeller University and of The Jackson Laboratory, Truste
Managers of Memorial Sloan-Kettering Cancer Center, a Dire
the Albert and Mary Lasker Foundation. Dr. Evnin received a
Massachusetts Institute of Technology. We believe Dr. Evnin
biopharmaceutical companies, as well as his expertise in corp
as a member of our board of directors.

Jean M. George has served as a member of our board o
Advanced Technology Ventures (ATV), and, concurrently sin
Management. She joined ATV in 2002 and serves as the firm
Ms. George was a Director at BancBoston Ventures, where sh
Microbia, Inc., Syntonix Pharmaceuticals, Inc. and Neuromet
1988 to 1998, where she held a variety of operational roles in
President of Global Sales and Marketing. She also worked as
currently a Director of Calithera Biosciences, Hydra Bioscien
Therapeutics and Catabasis Pharmaceuticals, Inc. Ms. George
was named a member of the Scientific Advisory Board for the
the University of Maine and an MBA from Simmons College
experience in the life sciences and therapeutic device industri

George Golumbeski, Ph.D. has served as a member of
Vice President of Business Development for Celgene Corpora
including identification and evaluation of opportunities, struc
management. At Celgene, these activities are focused primari
Dr. Golumbeski served as the CEO of Nabriva Therapeutics A
Development, Licensing and Strategy for Novartis-Oncology
of collaboration agreements which bolstered the development
Pharmaceuticals and at Schwarz Pharma, where he led the eff
Dr. Golumbeski received a BA in biology from the University
believe that Dr. Golumbeski's experience as an officer of othe
research and development and corporate leadership positions,

Edwin M. Kania, Jr. has served as a member of our boa
the Chairman of Flagship Ventures, a Boston-based

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venture capital firm that he co-founded and that also manages
funds raised by OneLiberty Ventures. Prior to co-founding Fl
predecessor firm, Morgan Holland Ventures which he joined
Mr. Kania has also served on the boards of Aspect Medical, E
investment experience covers over 100 companies, and he has
companies as the founding, lead or co-lead investor, and has
a BS in physics from Dartmouth College and an MBA from H
investing in, guiding and leading start-up and early phase com

Tom Maniatis, Ph.D. co-founded Acceleron in 2003 an
Advisory Board since 2003. Since 2010 he has been a Profess
Columbia University College of Physicians and Surgeons. Pri
where he studied the mechanisms of transcription and RNA s
Pharmaceuticals, Inc. Dr. Maniatis is also a co-founder of Ge
Dr. Maniatis is a member of the U.S. National Academy of Sc
the Eli Lilly Research Award in Microbiology and Immunolo
French National Academies of Science, and the 2012 Lasker-
BA in biology, an MS in chemistry from the University of Co
We believe Dr. Maniatis's extensive experience and knowledg
a member of our board of directors.

Terrance G. McGuire has served as a member of our b
is currently one of their general partners. Prior to starting Pola
investing in early stage medical and information technology c
Alector, Quantum Designs, Arsenal Medical/480 Biomedical
NextCode, Pulmatrix, SustainX, and Trevena. He has served
Technologies, GlycoFi, Akamai Technologies, Aspect Medic
Mr. McGuire is the former chairman of the National Venture
Dartmouth College, and a member of the boards of The David
Technology and The Arthur Rock Center for Entrepreneurshi
from Hobart College, an MS in engineering from The Thayer
believe that Mr. McGuire's extensive experience as a venture
years of experience helping companies evolve from the start-u
board of directors.

Richard F. Pops has served as a member of our board o
and Chairman of the board of Alkermes plc, the parent compa
and Chairman of the Board of Alkermes, from 2007 to 2009 h

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and from 1991 through 2007 he served as the Chief Executive
Biosciences, Inc., Epizyme Inc., the Biotechnology Industry C
(PhRMA). He has previously served on the board of directors
2009. Mr. Pops also served on the board of directors of Relian
GlaxoSmithKline in 2007, and on the advisory board of Polar
Fellows from 2002 through June 2012. Mr. Pops received a B
experience and industry knowledge qualify him to serve as a

Joseph S. Zakrzewski has served as a member of our bo
been Chairman and Chief Executive Officer of Amarin Corpo
Executive Officer of Xcellerex. From 2005 to 2007, Mr. Zakr
overseeing the launch of Omacor®, a drug to treat elevated tr
positions at Eli Lilly and Company including as Vice Presider
Mr. Zakrzewski served as a Venture Partner with OrbiMed in
Amarin and Insulet Corporation and has also served on the bo
Mr. Zakrzewski received a BS in Chemical Engineering and a
Finance from Indiana University. We believe that Mr. Zakrze
companies, as well as Mr. Zakrzewski's service on boards of
our board of directors.

Board Composition

Our board of directors is currently comprised of 9 memb
Messrs Evnin, Golumbeski, Kania, Maniatis, McGuire, Pops
of directors were elected in compliance with the provisions of
terminated upon the closing of our initial public offering on S
regarding the election of our directors. See "Certain Relations
successors have been elected and qualified or until their earlie
directors or executive officers.

Board Committees

Our board of directors has three standing committees: th
governance committee.

Audit Committee

Our audit committee is composed of Anthony B. Evnin,
chairman of the committee. Our board of directors has determ
requirements of Rule 10A-3 under the Exchange Act and the
Joseph S. Zakrzewski is an "audit committee financial expert"

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meaning of the Securities and Exchange Commission, or SEC
responsibilities include:

- appointing, approving the compensation o
independent registered public accounting
- pre-approving audit and permissible non-
registered public accounting firm;
- reviewing the internal audit plan with the
responsible for preparing our financial sta
- reviewing and discussing with manageme
financial statements and related disclosur
- reviewing the adequacy of our internal co
- establishing policies and procedures for th
- recommending, based upon the audit com
public accounting firm, whether our audit
- monitoring our compliance with legal and
matters;
- preparing the audit committee report requ
- viewing all related party transactions for p
- reviewing and discussing with manageme
scripts.

Compensation Committee

Our compensation committee is composed of Edwin M.
as chairman of the committee. Our board of directors has dete
defined under the applicable listing standards of NASDAQ. T

- annually reviewing and approving corpor
- evaluating the performance of our chief e
approving the compensation of our chief

reviewing and approving the compensatio

appointing, compensating and overseeing
the compensation committee;

conducting the independence assessment
counsel or other advisor retained by the c

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annually reviewing and reassessing the ad
NASDAQ;

reviewing and establishing our overall ma

overseeing and administering our equity c

reviewing and approving our equity and i
the grant of such equity-based awards;

reviewing and making recommendations

reviewing and discussing with manageme
statement or Annual Report on Form 10-K

Nominating and Corporate Governance Committe

Our nominating and corporate governance committee is
with Ms. George serving as chairman of the committee. Our b
governance committee is "independent" as defined under the
committee's responsibilities include:

developing and recommending to the boa

establishing procedures for identifying an
stockholders;

identifying individuals qualified to becom

recommending to the board of directors th
committees;

developing and recommending to the boa

articulating to each director what is expec
and responsibilities;

reviewing and recommending to the boar

reviewing and recommending to the boar
of directors;

reviewing and assessing the adequacy of
approval;

consider and report to the board of directo

provide for new director orientation and c

performing an evaluation of the performa

overseeing the evaluation of the board of

Our board of directors may establish other committees from t

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Compensation Committee Interlocks and Insider P

None of the members of our compensation committee ha
None of our executive officers currently serves, or in the past
committee of any entity that has one or more executive office
transactions between us and members of our compensation co
Related Party Transactions."

Code of Business Conduct and Ethics

We have adopted a code of business conduct and ethics t
responsible for financial reporting. Our code of business cond
the code, or any waivers of its requirements, on our website.

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EXECUTIVE OFFIC

Overview

The following discussion relates to the compensation of two most highly compensated executive officers (other than c and Senior Vice President, and John D. Quisel, J.D., Ph.D., ou this prospectus as our named executive officers. Each year, ou executive officers, including our named executive officers. O team of key executives and to align the compensation of our e short- and long-term strategic financial goals, which we belie

Elements of Executive Compensation

The compensation of our named executive officers consi are made available to all salaried employees. Our named exec terminations of employment and certain change in control tra

Base Salaries. Base salaries for our named executive c with his respective experience and contributions to the compa compensation committee, subject to review by our board of d takes factors into account such as each officer's experience an surveys of compensation paid by comparable companies, and factor. For fiscal 2013, our board of directors approved a base increase of 4.5% and 3.0%, respectively, from the base salary

Annual Cash Bonuses. Our annual cash bonus progra fiscal 2013, the target annual bonus as a percentage of base sa 30%, respectively.

At the beginning of fiscal 2013, our compensation comm that included key strategic and financial goals of the company manufacturing, business development and the achievement of committee met and evaluated the performance of the compan compensation committee recommended payment of 2013 ann above the target level for members of our management team, performance of the company, the achievement of the compan completion of important financing activities in fiscal 2013, in directors approved the recommendations of our compensation 2013 equal to $300,000, $171,315 and $143,685, respectively base salary.

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Equity Awards. Our named executive officers particip
which we refer to as the "2003 Plan". See " 2003 Plan" belov
participate in our Acceleron Pharma Inc. 2013 Equity Incenti
Incentive Plan" below for additional details about the 2013 E
Plan, including those made to our named executive officers, g
are subject to time-based vesting generally vest either in quar
option after one year and thereafter continue to vest in quarte
employment. During fiscal 2013, each of Drs. Knopf, Sherma
purchase 110,000, 29,000 and 29,000 shares of our common s
years. Stock option awards serve to align the interests of our
the value of our common stock appreciates after grant. They a
agreements with certain members of senior management, incl
restricted stock awards will vest automatically as of the date
restricted stock awards may vest upon certain terminations of

Benefits. We provide modest benefits to our named ex
plan and basic health and welfare benefit coverage, are availa

Employment Agreements and Change of Control Agree
agreements with us that include severance, change of control,
arrangements provide our executives with security that will li
that could be in the best interests of our stockholders. We also
order to attract and retain high-quality executive officers.

Summary Compensation Table

The following table sets forth information about certain
year.

Name and Principal Position	Year
John L. Knopf, Ph.D.	201
Chief Executive Officer and President	201
Matthew L. Sherman, M.D.	201
Chief Medical Officer & Senior Vice President	201
John D. Quisel, J.D., Ph.D.	201
General Counsel, Vice President and Secretary	201

(1) Salaries include amounts contributed by the named

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(2) Amounts shown reflect the grant date fair value of
the Financial Accounting Standards Board, Accoun
amounts exclude the value of estimated forfeitures.
amount included in the table assumes the highest le
amounts are included in Note 11 to our financial sta

(3) Amounts shown reflect the cash bonus amount paid
based on company performance.

(4) Represents income imputed to Dr. Knopf in connec
into by him and the Company, plus accrued interest

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding equ

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Name	Number of Securities Underlying Unexercised Options (#) Exercisable
John L. Knopf	12,500(
	12,500(
	100,000(
	262,500(
	46,876(
	65,625(
	25,000(
	42,969(
	3,125(
Matthew L. Sherman	59,766(
	32,812(
	35,000(
	28,125(
	6,250(
	6,250(
John D. Quisel	27,500(
	2,500(
	7,500(
	12,500(
	25,000(
	46,875(
	9,374(
	9,375(
	3,125(

(1) Reflects time-based options to purchase shares of o first anniversary of the vesting commencement date subject to the executive's continued employment.

(2) Reflects time-based options to purchase shares of o subject to the executive's continued employment.

(3) Reflects time- and performance-based options grant the shares subject to the option on the date that is th condition related either to a financial goal or clinica years on each three-month anniversary of the initial

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extent unvested, the option will fully vest on Septe

(4) Reflects time- and performance-based options gran the shares subject to the option on the date that is th condition related to a financial goal and that contin anniversary of the initial vesting date. To the extent Dr. Knopf's continued employment. On December on September 24, 2013. As a result, 1/12th of the sh the shares will vest on each of the subsequent eleve

(5) The exercise price of the stock options was not less determined by our board of directors based, in part, public offering. Stock options granted in fiscal 201 equal to the closing price of a share of our common

(6) All stock options have a 10-year term measured fro

Retirement Benefits

We do not maintain any qualified or non-qualified defin executive officers. We offer a tax-qualified retirement plan, w executive officers. Our 401(k) plan permits eligible employee limitations imposed by the Internal Revenue Service. Employ plan. We may, but are not required to, make discretionary ma employees under this plan. We made matching contributions on behalf of our named executive officers.

Employment Agreements

We have entered into amended and restated employment 2013 base salary of $400,000, $380,662 and $319,300, respec bonus based on performance goals in accordance with our an benefits upon a qualifying termination of the executive's emp

Change of Control. At the time of the consummation Sherman and Quisel, of any unvested stock options then held amended and restated employment agreement (referred to as

Termination of Employment Without Cause or for Goo consummation of a change of control, the executive's employ terminates his employment for good reason (as such terms are lump sum payment equal to the product of 1.5 times, in the ca

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times, in the case of Drs. Sherman and Quisel, (x) the sum of
bonus for the year in which the termination occurs, (2) 100%
such termination will fully vest, and (3) if the executive elects
and/or dental plans in which the executive was participating p
the full premium cost of that participation for 18 months, in th
following the date the executive's employment terminates or,
new employer. We will also pay the executive any base salary
the termination date.

Termination of Employment Without Cause or for Goo
or the executive terminates his employment for good reason (
circumstances other than as described in the preceding paragr
18 months, in the case of Dr. Knopf, or 12 months, in the case
unvested stock option awards the executive holds at the time
that were granted on or prior to the amendment date will vest
12 months, nine months or six months, in the case of each of
employment, and (3) if the executive elects under COBRA or
in which the executive was participating prior to such termina
cost of that participation for 18 months, in the case of Dr. Kn
executive any base salary earned but not paid and any vacatio

Termination of Employment Due to Death or Disability
disability, all unvested stock options then held by the executiv
termination. In the event of such a termination of employmen
continuation of the executive's base salary for one year follow
time the executive's base salary would otherwise have been pa
disability insurance benefits, if any, actually paid to the execu
vacation time accrued but not used, in each case as of the term

Severance Subject to Release of Claims and Compliance
severance payments or other benefits under the employment a
our favor and the executive's continued full performance of hi
Information Agreement relating to confidentiality, noncompe

Other Termination of Employment. If the executive's
executive for good reason, or due to the executive's death or d
and any accrued but not used vacation as of the termination d

280G Gross-up. In the event that a change in ownershi
1986, as amended, or the Code, and the regulations

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thereunder, occurs on or before the second anniversary of the
employment agreement or otherwise constitutes an "excess pa
executive an additional amount that, after the imposition of al
the excess parachute payment. If the change in ownership or c
of the payments made pursuant to the employment agreement
to receive an amount of such payments reduced so that no por
otherwise payable to the executive under the employment agr
whichever amount results in the greater amount payable to the

Executive Loan

We and Dr. Knopf are parties to a Secured Promissory N
we made a loan to Dr. Knopf with a principal balance of $200
including principal and accrued and unpaid interest on the not
in connection with our initial public offering.

2013 Director Compensation

The following table sets forth information concerning the
additional compensation for his service as a director, and, con
an employee during 2013 is included in the "Summary Comp

Name	Fees Paid in Cash ($)(1)	Option Awa ($)(2)(3)
Anthony B. Evnin	13,438	308
Jean George	12,500	308
Edwin M. Kania	11,250	308
Tom Maniatis	25,000	308
Terrance G. McGuire	9,688	308
Richard F. Pops	31,250	308
Joseph S. Zakrzewski	30,625	308

(1) Amounts represent annual cash compensation for se

(2) As of December 31, 2013, our directors held the fol
Mr. Kania, 20,000; Mr. McGuire, 20,000; Dr. Mani
not hold any stock options or other stock awards as

(3) Amounts shown reflect the grant date fair value of
Accounting Standards Board, Accounting Standard
exclude the value of estimated forfeitures. Assumpt
financial statements included elsewhere in this pros

Our board of directors has adopted a non-employee direc
that enables us to attract and retain, on a long-term basis,

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high caliber non-employee directors. Under the policy, all no

Board of Directors:
All non-employee members
Additional retainer for Lead Independent Director
Audit Committee:
Chairman
Non-Chairman members
Compensation Committee:
Chairman
Non-Chairman members
Nominating and Corporate Governance Committee:
Chairman
Non-Chairman members

Under our non-employee director compensation policy, eligible to receive a grant of stock options to purchase 20,000 she first becomes a non-employee director, which will vest qu non-employee director will be eligible to receive an annual op on the first anniversary of the grant date. The options will be common stock on the date of grant. In connection with the co and increased duties of the board, in fiscal year 2013, each bo 20,000 shares of our common stock.

Equity and Incentive Plans

2003 Plan

The 2003 Plan, which became effective December 17, 20 for the grant or sale of restricted stock to key employees and opinion of the compensation committee, are in a position to c of the 2003 Plan is not a complete description of all provision

The 2003 Plan is administered by our compensation com determine the terms and conditions of all awards, including th exercisable.

Following our initial public offering in September 2013, described below.

Authorized Shares. Subject to adjustment, the maximu awards under the 2003 Plan is 4,937,500 shares. Shares of ou shares of our common stock or previously issued shares acqui

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Stock Options. The compensation committee determin
value of a share of our common stock on the date of grant. Un
stock options will immediately terminate upon the participant
three months or one year (in the case of death) (or, in each ca
determines that the cessation of a participant's employment re
termination of stock options, all stock options then held by th
whether or not vested.

Restricted Stock. The compensation committee may gr
exercise of options to purchase common stock) subject to the
compensation committee. A participant will have all the right
participant under the 2003 Plan. Unless the compensation com
any reason, including death, the company will have the right
participant's original purchase price, if any, for such shares. If
of employment.

Covered Transactions. Unless an award agreement pro
in which there is an acquiring or surviving entity, the compen
outstanding awards by the acquiring or surviving entity. If the
award agreement, each stock option will vest and become full
upon consummation of the covered transaction. In the case of
delivered, exchanged or otherwise paid in respect of such stoc
subject to such restrictions as the compensation committee de
consolidation, merger or similar transaction in which the com
assets or a dissolution or liquidation of our company.

2013 Equity Incentive Plan

Our board of directors adopted the 2013 Equity Incentive
awards will be granted under the 2013 Equity Incentive Plan.
Plan. This summary of the 2013 Equity Incentive Plan is not a
qualified in its entirety by reference to the 2013 Equity Incent

Plan Administration. The 2013 Equity Incentive Plan
the authority to, among other things, interpret the 2013 Equity
under the 2013 Equity Incentive Plan, and to do all things nec
compensation committee's determinations under the 2013 Equ

Authorized Shares. Subject to adjustment, the maximu
awards under the 2013 Equity Incentive Plan is currently 2,63
available for grant under the 2003 Plan on the date the 2013 E
2014 pursuant to the annual adjustment described below. The

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shares of our common stock available for issuance under the 2
January 1st, from January 1, 2014 through January 1, 2023, in

- 3,150,000 shares;
- 4.0% of the outstanding shares of our con
- and
- such other amount as our board of directo

On January 1, 2014, the number of shares of our commo
there were 2,089,945 shares of our common stock available fo
issued under the 2013 Equity Incentive Plan may be authorize
us. Any shares of our common stock underlying awards that a
issuance of stock will again be available for issuance under th

Individual Limits. The maximum number of shares of
our common stock subject to stock appreciation rights that ma
maximum number of shares of our common stock subject to o
shares.

Eligibility. Our compensation committee will select pa
our affiliates who are in a position to contribute significantly
incentive stock options, or ISOs, is limited to employees of th

Types of Awards. The 2013 Equity Incentive Plan prov
unrestricted stock, stock units, performance awards and other
Dividend equivalents may also be provided in connection wit

- Stock options and stock appreciation righ
  appreciation right is to be measured, may
  percent shareholder, 110% of the fair mar
  committee will determine the time or time
  terms on which such awards remain exerc
- Restricted and unrestricted stock. A restri
  while an unrestricted stock award is not s
- Stock units. A stock unit award is denomi
  cash measured by the value of the shares
  satisfaction of performance conditions or
- Performance awards. A performance awa
  specified performance criteria.

Vesting. Our compensation committee has the authorit
vesting or exercisability of any award.

Termination of Employment. Our compensation comm
award. Unless otherwise provided by our compensation comm

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in an award agreement, upon a termination of a participant's e
requiring exercise will terminate and all other unvested award
held by the participant will remain outstanding for three mont
date, if earlier. All stock options and stock appreciation rights
employment will immediately terminate upon termination of
Plan or occurs in circumstances that would have constituted g
determination of the Administrator.

Performance Criteria. The 2013 Equity Incentive Plan
subject to achieving, "performance objectives". Performance
"performance-based compensation" for purposes of Section 1
measure or measures of performance relating to any or any co
or indices and determined either on a consolidated basis or, as
geographical basis or in combinations thereof): sales; revenue
interest, taxes, depreciation, amortization or equity expense, v
on equity, investment, capital, capital employed or assets; one
basis; net income; borrowing levels, leverage ratios or credit r
sales of particular products or services; customer acquisition
strategic alliances, licenses or collaborations; spin-offs, split-
(issuance of debt or equity) or refinancings; manufacturing or
regulatory or other filings or approvals or other product devel

To the extent consistent with the requirements for satisfy
compensation committee may provide in the case of any awar
objectives applicable to an award will be adjusted in an objec
restructurings, discontinued operations, mergers, acquisitions
effects of tax on accounting changes, each as defined by U.S.
of such award that affect the applicable performance objectiv

Transferability. Awards under the 2013 Equity Incenti
distribution, unless (for awards other than ISOs) otherwise pr

Covered Transactions. In the event of a consolidation,
assets or our dissolution or liquidation, our compensation con
outstanding awards, for new grants in substitution of outstand
cash-out of outstanding awards, in each case on such terms ar
committee may otherwise determine, awards not assumed wil
will automatically be forfeited upon the consummation of suc

Adjustment. In the event of a stock dividend, stock spl
change in our capital structure that constitutes an equity

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restructuring within the meaning of the Financial Accounting
Compensation Stock Compensation, our compensation comm
be delivered under, and the individual share limits included in
number and kind of shares of stock or securities subject to aw
such change. Our compensation committee will also make the
events other than those listed above if it determines that such

Amendment and Termination. Our compensation com
or terminate the 2013 Equity Incentive Plan as to future grant
terms of an award if it would affect materially and adversely a
expressly provided in the 2013 Equity Incentive Plan or the ri
committee at the time the award was granted). Stockholder ap
extent such approval is required by law, including the Code o

Employee Stock Purchase Plan

Our board of directors adopted an Employee Stock Purch
our named executive officers, to acquire shares of our commo
are available for issuance under the ESPP. Under the ESPP, e
pre-specified purchase periods at a price equal to the lesser of
the purchase period or 85% of the fair market value of a share
prospectus, the initial purchase period under the ESPP has no
such initial purchase period will commence.

Acceleron Pharma Inc. Cash Incentive Plan

Our board of directors adopted the Acceleron Pharma In
year, annual award opportunities for executive officers, inclu
the Cash Incentive Plan. The following summary describes th
description of all provisions of the Cash Incentive Plan and is

Administration. The Cash Incentive Plan will be admi
authority to interpret the Cash Incentive Plan, and any interpr
arising under the Cash Incentive Plan will be final and conclu

Eligibility. Executive officers and other key employees
compensation committee to participate in the Cash Incentive

Awards. Award opportunities under the Cash Incentive
period of time following the beginning of, the fiscal year of th
The compensation committee will establish the performance c
criteria are achieved, and such other terms and conditions as t

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compensation committee deems appropriate. The Cash Incent
performance-based compensation under Section 162(m) as w
qualify as performance-based compensation will be administe

Performance Criteria. Awards under the Cash Incenti
established by our compensation committee. Performance crit
purposes of Section 162(m) are limited to the objectively dete
following (measured either absolutely or by reference to an in
on a consolidated basis or, as the context permits, on a divisio
thereof): sales; revenues; assets; expenses; earnings before or
equity expense, whether or not on a continuing operations or
employed or assets; one or more operating ratios; operating in
leverage ratios or credit rating; market share; capital expendit
services; customer acquisition or retention; acquisitions and d
collaborations; spin-offs, split-ups and the like; reorganizatio
refinancings; manufacturing or process development; or achie
approvals or other product development milestones.

To the extent consistent with the requirements of Sectio
intended to qualify as exempt performance-based compensati
such award be adjusted in an objectively determinable manne
discontinued operations, mergers, acquisitions, extraordinary
on accounting changes, each as defined by U.S. generally acc
that affect the applicable performance criteria.

Payment. A participant will be entitled to payment unc
the Cash Incentive Plan and the terms of the award. Followin
(and, to the extent required by Section 162(m), certify) wheth
compensation committee will then determine the actual paym
absolute discretion to reduce (including to zero) the actual pa
payment dates for awards under the Cash Incentive Plan. Our

Payment Limits. The maximum payment to any partic
$1 million.

Recovery of Compensation. Awards under the Cash In
participant who receives a payment pursuant to the Cash Ince
our compensation committee in an award agreement, pursuan
compensation, or as otherwise required by law or applicable s

Amendment and Termination. Our compensation com
amendment will be approved by our stockholders if required
Plan at any time.

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CERTAIN RELATIONSH

The following is a description of transactions, since Janu
or will exceed $120,000, and in which any related person had

Indemnification Agreements

We have entered into indemnification agreements with e
indemnify these individuals and, in certain cases, affiliates of
liabilities that may arise by reason of their service to us or at
them as to which they could be indemnified.

Registration Rights Agreement

In connection with our Series F preferred stock financing
rights agreement with the holders of all of our then-outstandi
entities with which certain of our directors are affiliated. The
securities, as defined in the agreement, have the right to dema
upon conversion of our preferred stock. These holders may al
registration statements that we are otherwise filing. See "Desc

Right of First Refusal and Co-Sale Agreement

In connection with our Series F preferred stock financing
refusal and co-sale agreement with the holders of all of our th
officers and entities with which certain of our directors are af
shares of our common or preferred stock, the seller was requi
certain conditions and restrictions. This agreement terminated

Voting Agreement

In connection with our Series F preferred stock financing
with the holders of all of our then-outstanding shares of prefe
certain of our directors are affiliated, with respect to the electi
pursuant to the terms of this agreement. This agreement termi

Investor Rights Agreement

In connection with our Series F preferred stock financing
agreement with the holders of all of our then-outstanding shar
with which certain of our directors are affiliated. Pursuant to
well as the right to participate pro rata in any future private fi
offering on September 24, 2013.

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Transactions with Our Executive Officers, Directors and

On March 13, 2013, we repurchased shares of our comm
from UBS Juniper Crossover Fund, LLC, an affiliate of Orbi

On January 28, 2008, we entered into a secured promiss
2012, with a principal balance of $200,000 and an interest rat
stock under a pledge agreement dated January 28, 2008. The
upon the occurrence of certain corporate events, including the
and accrued and unpaid interest on the note was forgiven on

Related Person Transactions Policy

We have adopted a related person transaction approval p
if we want to enter into a transaction with a related person or
transaction to determine, based on applicable NASDAQ and
board of directors. If pre-approval is required, such matters w
directors meeting. We may not enter into a related person tra
no further reviews are necessary or that all requisite corporate

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PRIN

The following table sets forth information relating to the
or group of affiliated persons, known by us to beneficially ow
each of our named executive officers; and all directors and ex

The number of shares beneficially owned by each entity,
the SEC, and the information is not necessarily indicative of b
includes any shares over which the individual has sole or shar
the right to acquire within 60 days of January 1, 2014 through
indicated, and subject to applicable community property laws
to all shares of common stock held by that person.

The percentage of shares beneficially owned is computed
January 1, 2014. Shares of our common stock that a person ha
purposes of computing the percentage ownership of the perso
percentage ownership of any other person, except with respec
Unless otherwise indicated

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below, the address for each beneficial owner listed is c/o John

Name and address of beneficial owner
5% or greater stockholders:
Polaris Venture Partners, and related funds(1) 650 East Kendall Street, 4th Floor Cambridge, MA 02142
Venrock Partners, and related funds(2) 55 Cambridge Parkway, Suite 100 Cambridge, MA 02142
Advanced Technology Ventures, and related funds(3) 500 Boylston Street, Suite 1380 Boston, MA 02116
Celgene Corporation(4) 86 Morris Avenue Summit, NJ 07901
Flagship Ventures(5) 1 Memorial Drive Cambridge, MA 02142
OrbiMed Advisors LLC(6) 601 Lexington Avenue, 54th Floor New York, NY 10022
Directors and named executive officers:
John L. Knopf, Ph.D.(7)
Anthony B. Evnin, Ph.D.(8)
Jean M. George(9)
George Golumbeski, Ph.D.
Edwin M. Kania, Jr.(10)
Terrance G. McGuire(11)
Tom Maniatis, Ph.D.(12)
Richard F. Pops(13)
Joseph S. Zakrzewski(14)
Matthew L. Sherman, M.D.(15)
John Quisel, J.D., Ph.D.(16)
All executive officers and directors as a group (15 persons)(1

*

Represents beneficial ownership of less than one pe

(1)

Consists of (i) 3,077,388 shares of common stock a
Partners IV, L.P. and (ii) 55,846 shares of common
Venture Partners Entrepreneurs' Fund IV, L.P. (toge
Management 2000, LLC directly or indirectly provi
Polaris Funds. Each of the Polaris Funds has the sol
held by the applicable Polaris Fund. The respective
investment power with respect to the shares held by

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The respective general partners disclaim beneficial
proportionate pecuniary interests therein. The mem
Members) are also members of Polaris Venture Ma
members of the general partner and North Star Ven
share voting and investment powers for the shares h
ownership of all such shares held by the funds exce
McGuire, a director of the Company, has an assigne
deemed to share voting and investment powers with
ownership of all the shares held by the funds except

(2)

Consists of (i) 414,360 shares of common stock and
Partners, L.P. (Venrock Partners), (ii) 2,032,352 sha
held by Venrock Associates IV, L.P. (Venrock IV)
common stock held by Venrock Entrepreneurs Fund
IV, the Venrock Entities). The sole general partner
of Venrock Partners is Venrock Partners Managem
Management IV, LLC (VEFM4). VM4, VPM and V
except to the extent of their indirect pecuniary inter
VM4, VPM and VEFM4 and as such, he may be de
disclaims beneficial ownership of these shares exce

(3)

Consists of (i) 2,018,586 shares of common stock a
Technology Ventures VII, L.P. (ATV VII), (ii) 81,0
held by Advanced Technology Ventures VII (B), L
2,301 shares of common stock held by Advanced T
stock and warrants to purchase 711 shares of comm
common stock and warrants to purchase 19,916 sha
(vi) 21,543 shares of common stock and warrants to
(ATV VI-E) and (vii) 4,128 shares of common stoc
(ATV A VII) is the general partner of ATV VII, AT
authority over the shares held by ATV VII, ATV V
are made collectively by Michael A. Carusi, Jean M
Wiberg (collectively, the ATV A VII Managing Dir
beneficial ownership of the shares held by ATV VI
interest therein. ATV Associates VI, L.L.C (ATV A
dispositive authority over the shares held by ATV V
collectively by Michael A. Carusi, Steven N. Balofi
A VI Managing Directors). ATV A VI and each of

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beneficial ownership of the shares held by ATV VI
Alliance Associates, L.L.C. (ATV Alliance, LLC) i
over the shares held by ATV A 2003. Voting and di
directors). ATV Alliance, LLC and Jean M. George
extent of their pecuniary interest therein.

(4)

Includes 38,979 shares of common stock that can be

(5)

Consists of (i) 2,146,720 shares of common stock h
(ii) 129,759 shares of common stock held by AGTC
general partner of AGTC Partners, L.P., which is th
wholly-owned subsidiary of Flagship Ventures Man
Flagship Ventures Management, Inc. and may be de
AGTC Fund. Mr. Kania, one of our directors, and D
Fund except to the extent of their pecuniary interest

(6)

Consists of (i) 509,989 shares of common stock and
Investments II, LP (OPI II), (ii) 1,362,080 shares of
OrbiMed Private Investments II (QP), LP (OPI QP)
common stock held by OPI II, and (iv) 66,900 share
OPI QP. OrbiMed Advisors LLC, or OrbiMed, a re
is the managing member of OrbiMed Capital GP II
Funds). Mr. Samuel D. Isaly is the managing memb
Mr. Isaly may be deemed to have voting and investi
Mr. Isaly disclaim beneficial ownership with respec

(7)

Includes 581,094 shares of common stock that can b

(8)

Consists of shares held by the Venrock Entities. By
to share beneficial ownership in the shares held by t
referred to in footnote 2 above. Includes 1,666 share

(9)

Consists of shares held by the ATV Entities. By vir
to share beneficial ownership in the shares held by t
to in footnote 3 above. Includes 1,666 shares of com

(10)

Consists of shares held by AGTC or AGTC Fund. E
deemed to share beneficial ownership in the shares
shares referred to in footnote 4 above. Includes 1,66
options.

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(11) Consists of shares held by Polaris Venture Partners
Mr. McGuire may be deemed to share beneficial ow
Mr. McGuire disclaims beneficial ownership of the

(12) Includes 1,666 shares of common stock that can be

Includes 26,250 shares of common stock that can b

(13) Includes 47,500 shares of common stock that can b

(14) Includes 18,855 shares of common stock that can b

(15) Includes 170,016 shares of common stock that can

(16) Includes 145,562 shares of common stock that can

(17) Includes 1,476,439 shares of common stock that ca

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DESCRI

General

The following description of our capital stock is intende
certificate of incorporation and amended and restated by-laws
a part, and to the applicable provisions of the Delaware Gener
incorporation as our certificate of incorporation, and we refer

Our authorized capital stock consists of 175,000,000 sha
preferred stock, par value $0.001 per share, all of which prefe

As of January 1, 2014, we had issued and outstanding:

- 28,348,633 shares of our common stock;
- options to purchase a total of 3,942,304 s
share;
- warrants to purchase a total of 979,699 sh
share;

As of January 1, 2014, we had 174 stockholders of recor

Common Stock

Dividend Rights. Subject to preferences that may appl
of common stock will be entitled to receive dividends out of a
from time to time determine.

Voting Rights. Each outstanding share of common sto
Holders of shares of our common stock shall have no cumula

Preemptive Rights. Our common stock will not be enti
securities.

Conversion or Redemption Rights. Our common stock

Liquidation Rights. Upon our liquidation, the holders
available for distribution, after payment of all debts and other
outstanding.

Listing. Our common stock is listed on the NASDAQ

Preferred Stock

Our board of directors may, without further action by ou
series and may, at the time of issuance, determine the designa
rights as well as the qualifications, limitations or restrictions t
redemption and liquidation preferences, any or all of which m
preferences of outstanding shares of preferred stock would re

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our common stock. Holders of shares of preferred stock may
payment is made to the holders of shares of our common stoc
more difficult or tend to discourage a merger, tender offer or
securities or the removal of incumbent management. Upon th
board of directors, without stockholder approval, may issue sh
affect the holders of shares of our common stock and the mar
and we have no present intention to issue any shares of prefer

Registration Rights

We are party to an amended and restated registration rig
stock.

Under the amended and restated registration rights agree
or request that their shares be included on a registration stater
of common stock. These registration rights are subject to con
underwriters of an offering to limit the number of shares inclu
requested S-1 or S-3 registration within 60 days before or six
pertaining to an underwritten public offering of securities for

Demand Registration Rights

Following the expiration of any applicable lock up perio
shares may require us to file a registration statement under th
and we are required to use our best efforts to effect the registr

Piggyback Registration Rights

If we propose to register any of our securities under the S
registrable shares are entitled to notice of such registration an
statement, subject to the right of any underwriter to limit the n
other than underwriting discounts and commissions, related to
rights agreement contains customary cross- indemnification p
in the event of misstatements or omissions in the registration
indemnify us for misstatements or omissions attributable to th
sold or no longer qualify as registrable shares.

Anti-Takeover Effects of Our Certificate of Incorporation

Our certificate of incorporation and by-laws contain cert
in the composition of the board of directors and which may ha
control of the company unless such takeover or change in con

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These provisions include:

Classified Board. Our certificate of incorporation prov
classes as nearly equal in number as possible. As a result, app
classification of directors has the effect of making it more dif
incorporation also provides that, subject to any rights of holde
number of directors are fixed exclusively pursuant to a resolu

Action by Written Consent; Special Meetings of Stockh
taken only at an annual or special meeting of stockholders and
incorporation and the by-laws also provide that, except as oth
pursuant to a resolution adopted by a majority of the board of
special meeting or to require the board of directors to call a sp

Removal of Directors. Our certificate of incorporation
of at least 75% of the voting power of our outstanding shares
supermajority vote to remove directors could enable a minori

Advance Notice Procedures. Our by-laws establish an
meeting of our stockholders, including proposed nominations
will only be able to consider proposals or nominations specifi
the board of directors or by a stockholder who was a stockhol
meeting and who has given our Secretary timely written notic
meeting. Although the by-laws do not give the board of direct
proposals regarding other business to be conducted at a specia
certain business at a meeting if the proper procedures are not
solicitation of proxies to elect its own slate of directors or oth

Super Majority Approval Requirements. The Delawar
majority of the shares entitled to vote on any matter is require
corporation's certificate of incorporation or by-laws requires a
affirmative vote of holders of at least 75% of the total votes e
repeal specified provisions. This requirement of a supermajor
could enable a minority of our stockholders to exercise veto p

Authorized but Unissued Shares. Our authorized but u
issuance without stockholder approval. These additional share
offerings to raise additional capital, corporate acquisitions and
common stock and preferred stock could render more difficul

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attempt to obtain control of a majority of our common stock b

Exclusive Forum. Our certificate of incorporation pro
State of Delaware is the sole and exclusive forum for (1) any
claim of breach of a fiduciary duty owed by any of our direct
claim against us arising pursuant to any provision of the Dela
(4) any other action asserting a claim against us that is govern
acquiring any interest in shares of our capital stock shall be d
incorporation described above. Although we believe these pro
Delaware law for the specified types of actions and proceedin
and officers. The enforceability of similar choice of forum pr
legal proceedings, and it is possible that, in connection with o
forum provisions contained in our certificate of incorporation

Section 203 of the Delaware General Corporation

We are subject to the provisions of Section 203 of the D
Delaware corporation from engaging in a "business combinat
this stockholder becomes an interested stockholder, unless the
combination" includes, among other things, a merger, asset or
stockholder. An "interested stockholder" is a person who, tog
determination of interested stockholder status, 15% or more o

Under Section 203, a business combination between a co
following conditions: before the stockholder became intereste
which resulted in the stockholder becoming an interested stoc
becoming an interested stockholder, the interested stockholde
the transaction commenced, excluding for purposes of determ
also officers, and employee stock plans, in some instances; or
was approved by the board of directors of the corporation and
vote of at least two-thirds of the outstanding voting stock whi

A Delaware corporation may "opt out" of these provisio
provision in its certificate of incorporation or by-laws resultin
outstanding voting shares. We have not opted out of these pro
may be discouraged or prevented.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is
250 Royall Street Canton, Massachusetts 02021.

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SHARES E

Future sales of our common stock, including shares issue
this offering, or the perception that those sales may occur, cou
ability to raise equity capital in the future.

As of January 1, 2014, based on the number of shares of
(2) no exercise of the underwriters' option to purchase additio
we would have had outstanding an aggregate of 30,383,633 sh
including the 6,417,000 shares sold in our initial public offeri
sold upon exercise of the underwriters' option to purchase add
further registration under the Securities Act of 1933, as amen
such term is defined in Rule 144 of the Securities Act. The re
in Rule 144 or subject to lock up agreements in effect in conn
(as described below) and will be available for sale in the publ

Approximate Number of Shares
5,896,337 shares, or 21%

14,969,573 shares, or 53%

Lock-up Agreements

In connection with this offering, we, our officers and dir
common stock outstanding as of January 1, 2014 have agreed
shares of our common stock or securities convertible into or e
lock-up agreement continuing through the date 90 days after t
Markets Inc. and Leerink Partners LLC, the representatives o
have no current intent or arrangement to release any of the sh

Following the lock-up periods set forth in the agreement
release any parties from these agreements, all of the shares of
date of this prospectus will be eligible for sale in the public m

In addition, pursuant to each of our amended and restate
co-sale agreement, the parties thereto have agreed that,

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if requested in writing by the representatives of the underwrit
sale of, grant any option for the purchase of, or otherwise disp
above. The representatives of the underwriters have invoked t
subject to the related transaction restrictions. Holders of appro
of common stock outstanding as of January 1, 2014, are colle
agreements with the underwriters in our initial public offering

Rule 144

In general, under Rule 144, as currently in effect, once w
Exchange Act of 1934, as amended, or the Exchange Act, for
who is not deemed to have been one of our "affiliates" for pur
has beneficially owned restricted securities within the meanin
owner other than one of our "affiliates," is entitled to sell thos
applicable) without complying with the manner of sale, volun
public information requirements of Rule 144. If such a person
the holding period of any prior owner other than "affiliates", t
complying with any of the requirements of Rule 144 (subject
Rule 144, as currently in effect, once we have been subject to
90 days, our "affiliates", as defined in Rule 144, who have be
sell in the public market, upon expiration of any applicable lo
our common stock that does not exceed the greater of: 1% of
303,836 shares of common stock immediately after this offeri
outstanding as of January 1, 2014 and the assumptions descril
NASDAQ Global Market during the four calendar weeks prec

Such sales under Rule 144 by our "affiliates" or persons
provisions, notice requirements and to the availability of curr
holders of substantially all of our restricted securities have en
become eligible for sale (subject to the above limitations unde

Rule 701

In general, under Rule 701 as currently in effect, any of
stock from us in connection with a written compensatory stoc
Securities Act before the effective date of the registration stat
subject to a lock-up agreement) is entitled to rely on Rule 701
company reporting requirements of the Exchange Act in relia

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contained in Rule 144. Accordingly, subject to any applicable
company reporting requirements of the Exchange Act, under
those shares without complying with the minimum holding pe
"affiliates" may resell those shares without compliance with
agreement referred to below, if applicable).

Equity Incentive Plans

We have filed with the SEC a registration statement und
exercise of outstanding options reserved for issuance under o
Accordingly, shares registered under such registration statem
Rule 144 volume limitations and the lock-up agreements desc

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MATERIAL UNIT
CONSIDERA

The following is a summary of the material U.S. federal
disposition of our common stock by Non-U.S. Holders (defin
potential tax considerations relevant to Non-U.S. Holders of
Treasury regulations promulgated or proposed thereunder and
of which are subject to change at any time, possibly on a retro

This summary assumes that shares of our common stock
Revenue Code (generally, property held for investment). This
taxation that might be relevant to particular Non-U.S. Holders
specific tax considerations that may be relevant to particular p
companies, partnerships or other pass-through entities, certain
corporations", "passive foreign investment companies", corpo
special situations, such as those who have elected to mark sec
conversion transaction, synthetic security or other integrated i
3.8% Medicare tax on net investment income). In addition, ex
address estate and gift tax considerations or considerations un

For purposes of this summary, a "Non-U.S. Holder" mea
not classified as a partnership and is not:

an individual who is a citizen or resident

a corporation or any other organization ta
or under the laws of the United States, an

an estate, the income of which is included

a trust if (1) a U.S. court is able to exercis
have the authority to control all of the tru
applicable U.S. Treasury regulations to be

If an entity that is classified as a partnership for U.S. fed
treated as its partners for U.S. federal income tax purposes wi
partnership. Partnerships and other entities that are classified
common stock through a partnership or other entity classified
tax advisors.

There can be no assurance that the Internal Revenue Ser
and we have not obtained, nor do we intend to obtain a ruling
a Non-U.S. Holder of the purchase, ownership or disposition

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**THIS SUMMARY IS FOR GENERAL INFORMAT
HOLDERS ARE URGED TO CONSULT THEIR TAX A
TAXATION, STATE, LOCAL AND NON-U.S. TAXATIO
OWNERSHIP AND DISPOSITION OF OUR COMMON**

Distributions on Our Common Stock

As discussed under "Dividend Policy" above, we do not
cash or property with respect to our common stock, any such
purposes to the extent of our current and accumulated earning
distribution exceeds our current and accumulated earnings an
holder's adjusted tax basis in our common stock, but not belo
treatment described below in " Gain on Sale, Exchange or O
be subject to the discussion below under the section titled " A

Dividends paid to a Non-U.S. Holder generally will be s
us or our agent, as the case may be, with the appropriate IRS

IRS Form W-8BEN (or successor form) c
income tax treaty, or

IRS Form W-8ECI (or successor form) ce
because it is effectively connected with a
dividend generally will be subject to regu

The certification requirement described above must be p
periodically. The certification also may require a Non-U.S. H
taxpayer identification number. Special certification and othe
common stock through intermediaries or are pass-through ent

Each Non-U.S. Holder is urged to consult its own tax ad
exemption will not be valid if the person receiving the applica
are false.

If dividends are effectively connected with a trade or bus
income tax treaty, attributable to a U.S. permanent establishm
above (provided that the certifications described above are sa
net income basis in the same manner as if it were a resident o
U.S. federal income tax purposes, the Non-U.S. Holder may b
applicable income treaty) of its earnings and profits in respect

Non-U.S. Holders that do not timely provide us or our ag
federal withholding tax pursuant to an income tax treaty, may
appropriate claim for refund with the IRS.

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Gain on Sale, Exchange or Other Taxable Disposition of C

Subject to the discussion below under the section titled "
Holder will not be subject to U.S. federal income tax or withh
disposition of shares of our common stock unless (1) such No
more in the taxable year of disposition, and certain other cond
corporation", as defined in the Internal Revenue Code (a USR
disposition and the Non-U.S. Holder's holding period in the sh
is effectively connected with the conduct by such Non-U.S. H
income tax treaty, is attributable to a permanent establishmen

If the first exception applies, the Non-U.S. Holder gener
under an applicable income tax treaty) on the amount by whic
losses allocable to U.S. sources during the taxable year of the
subject to U.S. federal income tax with respect to such gain o
and a Non-U.S. Holder that is a corporation for U.S. federal i
earnings and profits attributable to such gain at a rate of 30%

Generally, a corporation is a USRPHC only if the fair m
Code) equals or exceeds 50% of the sum of the fair market va
in a trade or business. Although there can be no assurance in t
However, because the determination of whether we are a USR
the fair market value of other business assets, there can be no
USRPHC, a Non-U.S. Holder would not be subject to U.S. fe
stock by reason of our status as USRPHC so long as our comm
the calendar year in which the disposition occurs and such No
constructively) more than 5% of our common stock at any tim
holder's holding period. However, no assurance can be provid
market for purposes of the rules described above. Prospective
consequences to them if we are, or were to become, a USRPH

Additional Withholding and Reporting Requirements

Legislation enacted in March 2010 and related Treasury
U.S. federal withholding at a rate of 30% on payments of (1)
from the sale or other disposition of our common stock on or
institution" as defined under FATCA (including, among other
generally will be imposed, subject to certain exceptions, unles
agreement with the U.S. government (a "FATCA Agreement"
intergovernmental agreement between the United States and

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a foreign jurisdiction (an "IGA"), in either case to, among oth
information regarding U.S. account holders of such institutio
institution (as a beneficial owner), the tax generally will be in
withholding agent with a certification that it does not have an
indirectly owns more than a specified percentage of such enti
a foreign financial institution that enters into (or is otherwise
cases, a person paying amounts to such foreign financial insti
on payments of dividends and proceeds described above mad
information requests or (2) a foreign financial institution that
not required to comply with FATCA pursuant to applicable fo

Prospective investors should consult their own tax advis
stock, and the entities through which they hold our common s
applicable requirements to prevent the imposition of this 30%

Backup Withholding and Information Reporting

We must report annually to the IRS and to each Non-U.S
holder and the tax withheld, if any, with respect to the distribu
to establish that the holder is not a United States person (as de
applicable rate, currently 28%, with respect to dividends on o
withholding tax, as described above under the section titled "
withholding.

Information reporting and backup withholding will gene
Holder effected by or through the U.S. office of any broker, U
satisfies certain other requirements, or otherwise establishes a
apply to a payment of disposition proceeds to a Non-U.S. Hol
office of a broker. However, for information reporting purpos
ownership or operations generally will be treated in a manner
investors should consult their own tax advisors regarding the

Copies of information returns may be made available to
the Non-U.S. Holder is incorporated, under the provisions of

Backup withholding is not an additional tax. Any amoun
Holder can be refunded or credited against the Non-U.S. Hol
timely filed with the IRS.

Federal Estate Tax

Common stock owned (or treated as owned) by an indivi
federal estate tax purposes) at the time of death will be includ
applicable estate or other tax treaty provides otherwise, and th

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Citigroup Global Markets Inc. and Leerink Partners LLC the underwriters named below. Subject to the terms and condi underwriter named below has severally agreed to purchase, a the underwriter's name.

Underwriter	Num of Sh
Citigroup Global Markets Inc.	
Leerink Partners LLC	
Piper Jaffray & Co.	
JMP Securities LLC	
Total	2,03

The underwriting agreement provides that the obligation approval of legal matters by counsel and to other conditions. by the option to purchase additional shares described below)

Shares sold by the underwriters to the public will initiall Any shares sold by the underwriters to securities dealers may all the shares are not sold at the initial offering price, the unde representatives have advised us that the underwriters do not i

We have granted to the underwriters an option, exercisab shares at the public offering price less the underwriting disco of additional shares approximately proportionate to that under will be issued and sold on the same terms and conditions as th

We, and our officers and directors have agreed that, for a the prior written consent of Citigroup and Leerink, dispose of common stock. Citigroup and Leerink in their sole discretion which, in the case of officers and directors, shall be with notic

Our common stock is listed on the NASDAQ Global Ma

The following table shows the underwriting discounts an offering. These amounts are shown assuming both no exercise common stock.

	Paid by Acceleron	
	No Exercise	Full Exercise
Per share	$	$
Total	$	$

We estimate that our portion of the total expenses of this

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We have also agreed to reimburse the underwriters for c
agreement.

In connection with the offering, the underwriters may pu
may include short sales, purchases to cover short positions, w
additional shares, and stabilizing purchases.

Short sales involve secondary market sale
purchase in the offering.

"Covered" short sales are sales
option to purchase additional sh

"Naked" short sales are sales of
underwriters' option to purchase

Covering transactions involve purchases
in the open market in order to cover short

To close a naked short position
is more likely to be created if th
the shares in the open market af

To close a covered short positio
option to purchase additional sh
underwriters will consider, amo
compared to the price at which

Stabilizing transactions involve bids to pu

Purchases to cover short positions and stabilizing purcha
the effect of preventing or retarding a decline in the market pr
price that would otherwise exist in the open market in the abs
NASDAQ Global Market, in the over-the-counter market or o
discontinue them at any time.

Other Relationships

Some of the underwriters and their affiliates have engage
dealings in the ordinary course of business with us or our affi
2013, for which they received, or may in the future receive, c

Conflicts of Interest

The underwriters are full service financial institutions en
investment banking, financial advisory, investment managem
underwriters and their respective affiliates may, from time to
of their business for which they may receive customary

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fees and reimbursement of expenses. In the ordinary course o
may make or hold a broad array of investments and actively t
instruments (which may include bank loans and/or credit defa
any time hold long and short positions in such securities and i
instruments of ours or our affiliates. The underwriters and the
independent research views in respect of such securities or fi
and/or short positions in such securities and instruments.

We have agreed to indemnify the underwriters against ce
payments the underwriters may be required to make because

Notice to Prospective Investors in the European Economic

In relation to each member state of the European Econo
state), with effect from and including the date on which the P
implementation date), an offer of shares described in this pros

to any legal entity which is a qualified inv

to fewer than 100 or, if the relevant memb
Directive, 150 natural or legal persons (ot
under the Prospectus Directive, subject to
any such offer; or

in any other circumstances falling within

provided that no such offer of shares shall require us or any u

For purposes of this provision, the expression an "offer o
any form and by any means of sufficient information on the te
purchase or subscribe for the shares, as the expression may be
in that member state, and the expression "Prospectus Directiv
Amending Directive, to the extent implemented in the relevan
member state. The expression 2010 PD Amending Directive m

The sellers of the shares have not authorized and do not
their behalf, other than offers made by the underwriters with a
Accordingly, no purchaser of the shares, other than the under
or the underwriters.

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Notice to Prospective Investors in the United Kingdom

This prospectus is only being distributed to, and is only d
meaning of Article 2(1)(e) of the Prospectus Directive that are
Services and Markets Act 2000 (Financial Promotion) Order 2
lawfully be communicated, falling within Article 49(2)(a) to (
prospectus and its contents are confidential and should not be
to any other persons in the United Kingdom. Any person in th
document or any of its contents.

Notice to Prospective Investors in France

Neither this prospectus nor any other offering material re
procedures of the *Autorité des Marchés Financiers* or of the c
notified to the *Autorité des Marchés Financiers*. The shares h
the public in France. Neither this prospectus nor any other off

released, issued, distributed or caused to b

used in connection with any offer for subs

Such offers, sales and distributions will be made in Franc

to qualified investors (*investisseurs qualif*
each case investing for their own account
D.734-1, D.744-1, D.754-1 and D.764-1 o

to investment services providers authorize

in a transaction that, in accordance with a
article 211-2 of the General Regulations (
public offer (*appel public à l'épargne*).

The shares may be resold directly or indirectly, only in c
of the French *Code monétaire et financier*.

Notice to Prospective Investors in Australia

No prospectus or other disclosure document (as defined
the common stock has been or will be lodged with the Austra
lodged with ASIC and is only directed to certain categories of

(a)

you confirm and warrant that you are eith

(i)

a "sophisticated investor" under

(ii)

a "sophisticated investor" under
accountant's certificate to us wh

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of section 708(8)(c)(i) or (ii) of

(iii) a person associated with the co

(iv) a "professional investor" within that you are unable to confirm professional investor under the of acceptance; and

(b) you warrant and agree that you will not o common stock being issued unless any su section 708 of the Corporations Act.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold in Hong Kong by offer to the public within the meaning of the Companies Ordi meaning of the Securities and Futures Ordinance (Cap. 571, L which do not result in the document being a "prospectus" wit advertisement, invitation or document relating to the shares m each case whether in Hong Kong or elsewhere), which is dire Hong Kong (except if permitted to do so under the laws of Ho of only to persons outside Hong Kong or only to "professiona Laws of Hong Kong) and any rules made thereunder.

Notice to Prospective Investors in Japan

The shares offered in this prospectus have not been and The shares have not been offered or sold and will not be offer Japan (including any corporation or other entity organized un requirements of the Financial Instruments and Exchange Law

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus other document or material in connection with the offer or sal distributed, nor may the shares be offered or sold, or be made indirectly, to persons in Singapore other than (i) to an institut Singapore (the SFA), (ii) to a relevant person pursuant to Sec conditions specified in Section 275 of the SFA or (iii) otherw provision of the SFA, in each case subject to compliance with

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Where the shares are subscribed or purchased under Sec

a corporation (which is not an accredited investments and the entire share capital o investor; or

a trust (where the trustee is not an accredi trust is an individual who is an accredited

shares, debentures and units of shares and debentures of that trust shall not be transferred within six months after that corp Section 275 of the SFA except:

to an institutional investor (for corporatio of the SFA, or to any person pursuant to a debentures of that corporation or such rig $0.2 million (or its equivalent in a foreign exchange of securities or other assets, and of the SFA;

where no consideration is or will be given

where the transfer is by operation of law.

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The validity of the issuance of our common stock offere
Massachusetts. Certain legal matters in connection with this o
Glovsky and Popeo, P.C., Boston, Massachusetts.

The financial statements of Acceleron Pharma Inc. at De
Prospectus and Registration Statement have been audited by
their report thereon appearing elsewhere herein, and are inclu
accounting and auditing.

WHERE YOU

We have filed with the SEC a registration statement on
offered hereby. This prospectus, which constitutes a part of th
registration statement or the exhibits and schedules filed there
hereby, reference is made to the registration statement and the
regarding the contents of any contract or any other document
and each such statement is qualified in all respects by referen
registration statement. A copy of the registration statement an
public reference room maintained by the SEC, located at 100
registration statement may be obtained from such offices upo
1-800-SEC-0330 for further information about the public refe
information statements and other information regarding regist

We are subject to the information and periodic reporting
reports, proxy statements and other information with the SEC
inspection and copying at the public reference room and webs

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Inde

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Report of Indepen

The Board of Directors and Stockholders of
Acceleron Pharma Inc.

We have audited the accompanying balance sheets of Ac
related statements of operations and comprehensive income (
flows for the years then ended. These financial statements are
an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standard
standards require that we plan and perform the audit to obtain
misstatement. We were not engaged to perform an audit of th
consideration of internal control over financial reporting as a
not for the purpose of expressing an opinion on the effectiven
express no such opinion. An audit also includes examining, o
statements, assessing the accounting principles used and signi
statement presentation. We believe that our audits provide a r

In our opinion, the financial statements referred to above
Pharma Inc. at December 31, 2011 and 2012, and the results o
generally accepted accounting principles.

Boston, Massachusetts
July 3, 2013, except for Note 16,
as to which the date is
September 5, 2013

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(amounts in thou

Assets
Current assets:
Cash and cash equivalents
Collaboration receivables (includes related party amounts of $ 2012, respectively)
Related party receivable
Prepaid expenses and other current assets
Total current assets
Property and equipment, net
Restricted cash
Related party receivables
Other assets
Total assets
Liabilities, redeemable convertible preferred stock and st
Current liabilities:
Accounts payable
Accrued expenses (includes related party amounts of $833 an respectively)
Deferred revenue
Deferred rent
Notes payable, net of discount
Total current liabilities
Deferred revenue, net of current portion
Deferred rent, net of current portion
Notes payable, net of current portion and discount
Warrants to purchase redeemable convertible preferred stock
Warrants to purchase common stock
Total liabilities
Commitments and contingencies (Note 7)
Redeemable convertible preferred stock (Note 8)
Stockholders' deficit:
Common stock, $0.001 par value: 104,013,161 shares authori outstanding at December 31, 2011 and 2012, respectively
Additional paid-in capital
Accumulated deficit
Total stockholders' deficit
Total liabilities, redeemable convertible preferred stock and s

See accompa

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A

Statements of Oper

(amounts in

Revenue:
Collaboration revenue:
License and milestone
Cost-sharing, net
Contract manufacturing
Total revenue[1]
Costs and expenses:
Research and development
General and administrative
Cost of contract manufacturing revenue
Total costs and expenses
Income (loss) from operations
Other (expense) income:
Other expense, net
Interest income
Interest expense
Total other expense, net
Net income (loss)
Comprehensive income (loss)
Reconciliation of net income (loss) to net income (loss) appli
Net income (loss)
Accretion of dividends, interest, redemption value and issuan
Net income (loss) applicable to participating securities
Net income (loss) applicable to common stockholders basic
Net income (loss)
Accretion of dividends, interest, redemption value and issuan
Net income (loss) applicable to participating securities
Net income (loss) applicable to common stockholders dilute
Net income (loss) per share applicable to common stockholde
Basic
Diluted

Weighted-average number of common shares used in comput stockholders:	
Basic	
Diluted	

(1) Includes related party revenue (Note 15) $ 64,2

See accompa

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Statements of Redeemable Co
(amounts

	Series A Redeemable Convertible Preferred Stock		Serie Redeem Conve Preferre
	Number of Shares	Value	Number of Shares
Balance at December 31, 2010	6,410,976	$ 57,433	4,204,185
Sale of Series F redeemable convertible preferred stock net of issuance costs of $92			
Accretion of dividends, interest, redemption value and issuance costs related to redeemable convertible preferred stock		4,616	
Compensation expense associated with stock options			
Grant of stock options to nonemployees			
Exercise of stock options			
Ecercise of common warrants			
Net loss			
Balance at December 31, 2011	6,410,976	62,049	4,204,185
Accretion of dividends, interest, redemption value and issuance costs related to redeemable convertible preferred stock		4,616	
Compensation expense associated with stock options			
Exercise of stock options			
Net loss			
Balance at December 31, 2012	6,410,976	$ 66,665	4,204,185

See accompa

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Statements of Redeemable Converti
(amounts

	Series E Redeemable Convertible Preferred Stock	
	Number of Shares	Value
Balance at December 31, 2010	816,060	$ 8,423
Sale of Series F redeemable convertible preferred stock net of issuance costs of $92		
Accretion of dividends, interest, redemption value and issuance costs related to redeemable convertible preferred stock		2,511
Compensation expense associated with stock options		
Grant of stock options to nonemployees		
Exercise of stock options		
Ecercise of common warrants		
Net loss		
Balance at December 31, 2011	816,060	10,934
Accretion of dividends, interest, redemption value and issuance costs related to redeemable convertible preferred stock		2,459
Compensation expense associated with stock options		
Exercise of stock options		
Net loss		
Balance at December 31, 2012	816,060	$ 13,393

See accompa

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Operating Activities
Net income (loss)
Adjustments to reconcile net income (loss) to net cash provid
Depreciation and amortization
Stock-based compensation
Amortization of debt discount
Accretion of deferred interest
Amortization of deferred debt issuance costs
Change in fair value of warrants
Changes in assets and liabilities:
Prepaid expenses and other current assets
Collaboration receivables
Related party receivable
Accounts payable
Accrued expenses
Deferred revenue
Deferred rent
Restricted cash
Net cash provided by (used in) operating activities
Investing Activities
Purchases of property and equipment
Net cash used in investing activities
Financing Activities
Proceeds from issuance of redeemable convertible preferred s
Proceeds from long-term debt, net of issuance costs
Payments of long-term debt
Proceeds from exercise of stock options and warrants to purch
Net cash provided by financing activities
Net increase (decrease) in cash and cash equivalents
Cash and cash equivalents at beginning of year
Cash and cash equivalents at end of year
Supplemental Disclosure of Cash Flow Information:
Cash paid for interest
Supplemental Disclosure of Non-Cash Investing and Finan
Accretion of dividends, interest, redemption value, and issuan

See accompa

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A

Note

Years End

1. Nature of Business

Acceleron Pharma Inc. (Acceleron or the Company) was
The Company subsequently changed its name to Acceleron P
Cambridge, Massachusetts-based biopharmaceutical company
therapeutics for cancer and rare diseases. The Company's rese
protein superfamily, a large and diverse group of molecules th
coupling its discovery and development expertise, including i
engineering and manufacturing capabilities, the Company has
numerous innovative protein therapeutics with novel mechani
that are currently being studied in 12 ongoing Phase 2 clinica

The Company is subject to risks common to companies i
never achieves profitability, the need for substantial additiona
dependence on key personnel, protection of proprietary techn

Liquidity

As of December 31, 2012, the Company had an accumul
its research and development. The Company believes that its
Company to fund its current operating plan through January 1
operations beyond this time. As the Company continues to inc
approval and commercialization of its product candidates and
structure. The Company may never achieve profitability, and
capital. Management intends to fund future operations throug
collaborations. There can be no assurances, however, that add

2. Summary of Significant Accounting Policies

The accompanying financial statements reflect the applic
these notes to the financial statements. The Company believes
the Company's financial condition and results, and requires m
the need to make estimates about the effect of matters that are

Basis of Presentation

The accompanying financial statements have been prepa
of America (GAAP). Any reference in these notes to applicab
accounting

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Notes to F

2. Summary of Significant Accounting Policies (continued

principles as found in the Accounting Standards Codification Standards Board (FASB).

Use of Estimates

The preparation of financial statements in conformity wi reported amounts of assets and liabilities, the disclosure of co amounts expensed during the reporting period. Actual results

Management considers many factors in selecting approp assumptions that are used in the preparation of these financial addition, other factors may affect estimates, including: expect assumptions used in developing estimates, and whether histor often may yield a range of potentially reasonable estimates of within that range of reasonable estimates. This process may re preparation of the financial statements if these results differ fr accurate, even if such assumptions are reasonable when made the following areas, among others: revenue recognition, stock awards, the fair value of liability-classified warrants, accrued related valuation allowance.

The Company utilizes significant estimates and assumpti directors (the Board) determined the estimated fair value of th including external market conditions affecting the biotechnol convertible preferred stock, the superior rights and preference of achieving a liquidity event, such as an initial public offerin

The Company utilized various valuation methodologies Accountants' Technical Practice Aid, *Valuation of Privately-* of its common stock. Each valuation methodology includes es assumptions include a number of objective and subjective fac sector, the prices at which the Company sold shares of preferr Stock at the time and the likelihood of achieving a liquidity e valuations could result in different fair values of common sto

Reclassifications

The Company has reclassified certain prior period amou deferred rent from long-term to short-term to

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Notes to F

2. Summary of Significant Accounting Policies (continued

conform to the current period presentation. This reclassificati
the year ended December 31, 2011.

Collaboration Receivable

Credit is extended to customers based upon an evaluatio
realizable value. The Company does not charge interest on pa
payment due date is exceeded. The Company utilizes a specif
outstanding balances and previous activities to determine the
receivables at the time the Company determines the receivabl
accounts at December 31, 2011 or 2012.

Segment Information

Operating segments are identified as components of an e
evaluation by the chief operating decision maker, or decision
performance. The Company's chief operating decision maker
Company's operations and manage its business as one operati
States. The Company does use contract research organization
expenses are subject to collaboration reimbursement which is
comprehensive income (loss).

Cash and Cash Equivalents

The Company considers all highly liquid investments pu
equivalents. Cash and cash equivalents include cash held in b
are carried at cost, which approximates their fair market valu

Concentrations of Credit Risk and Off-Balance Sh

The Company has no off-balance sheet risk, such as fore
Financial instruments that potentially subject the Company to
and accounts receivable. The Company maintains its cash and
institutions that management believes are creditworthy. The C
and financial instruments and defines allowable investments t

The Company routinely assesses the creditworthiness of
material losses related to receivables from individual custome
require collateral. Due to these factors, no additional credit ris
probable in the Company's accounts receivable.

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Notes to F

2. Summary of Significant Accounting Policies (continued

Deferred IPO Issuance Costs

Deferred issuance costs, which primarily consist of direc
deferred issuance costs will be offset against IPO proceeds up
delayed more than 90 days, deferred offering costs will be ex

Disclosure of Fair Value of Financial Instrument

The carrying amounts of the Company's financial instrun
payable, accrued expenses and notes payable, approximated t
these instruments, and for the notes payable, the interest rates
discussion below on the determination of the fair value of the

The Company has evaluated the estimated fair value of f
estimates. The use of different market assumptions and/or est
amounts.

Fair Value Measurements

ASC Topic 820, *Fair Value Measurement* (ASC 820), es
distinguishes between assumptions based on market data (obs
Observable inputs are inputs that market participants would u
independent of the Company. Unobservable inputs are inputs
would use in pricing the asset or liability, and are developed b

ASC 820 identifies fair value as the exchange price, or e
transfer a liability in an orderly transaction between market pa
measurements, ASC Topic 820 establishes a three-tier fair va

Level 1 Quoted market prices in active n

Level 2 Inputs other than Level 1 inputs
rates, and yield curves.

Level 3 Unobservable inputs developed
market participant would use.

To the extent that the valuation is based on models or inp
value requires more judgment. Accordingly, the degree of jud
instruments categorized in Level 3. A financial instrument's le
significant to the fair value measurement.

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Notes to F

2. Summary of Significant Accounting Policies (continued

Items measured at fair value on a recurring basis include purchase common stock (Note 6). During the periods presente that are measured at fair value using Level 3 inputs.

The following tables set forth the Company's financial in financial instrument as of December 31, 2011 and 2012 (in th

Assets:	
Money market funds	
Restricted cash	
Total assets	
Liabilities:	
Warrants to purchase redeemable convertible preferre stock	
Warrants to purchase common stock	
Total liabilities	

Assets:	
Money market funds	
Restricted cash	
Total assets	
Liabilities:	
Warrants to purchase redeemable convertible preferre stock	
Warrants to purchase common stock	
Total liabilities	

The following table sets forth a summary of changes in t represents a recurring measurement that is classified within

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Notes to F

2. Summary of Significant Accounting Policies (continued

Level 3 of the fair value hierarchy, wherein fair value is estim

	Year Ended December	
	2011	201
Beginning balance	$ 3,912	$
Change in fair value	481	
Exercises		
Repurchases		
Ending balance	$ 4,393	$

The money market funds noted above are included in ca recognizes transfers between levels of the fair value hierarchy during the years ended December 31, 2011 or 2012.

The fair value of the warrants on the date of issuance an using the Black-Scholes option pricing model. This method o classes of preferred stock, stock price volatility, the contractu nature of these inputs, the valuation of the warrants is conside the warrants, as well as for a summary of the significant input

The Company measures eligible assets and liabilities at f elected either upon initial recognition of an eligible asset or li accounting. The Company did not elect to remeasure any of it any financial assets and liabilities transacted in the years ende

Property and Equipment

Property and equipment is stated at cost. Maintenance ar expensed to operations as incurred. Upon disposal, retirement and any resulting gain or loss is included in the results of ope over the estimated useful lives of the assets, which are as follo

Asset
Computer equipment and software
Office and laboratory equipment
Leasehold improvements

The Company reviews long-lived assets when events or recoverable. Recoverability is measured by comparison of the

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Notes to F

2. Summary of Significant Accounting Policies (continued

book values of the assets to future net undiscounted cash flow
impaired, the impairment to be recognized is measured by the
measured based on the projected discounted future net cash fl
years ended December 31, 2011 or 2012.

Revenue Recognition

The company has primarily generated revenue through c
development and commercialization of protein therapeutics.

The Company recognizes revenue in accordance with FA
each unit of accounting when all of the following criteria are
services have been rendered; (3) the fee is fixed or determinab

Amounts received prior to satisfying the revenue recogn
Amounts expected to be recognized as revenue within the 12
portion. Amounts not expected to be recognized as revenue w
revenue, net of current portion.

Multiple Element Revenue Arrangements

The Company enters into collaboration agreements from
generally contain multiple elements or deliverables, which ma
(2) research and development activities performed for the col
(4) manufacturing clinical or preclinical material. Payments p
milestone payments upon achieving significant development
on future product sales.

Effective January 1, 2011, the Company adopted ASU N
amends Topic 605-25, *Revenue Recognition Multiple Eleme*
arrangements as well as existing agreements that are significa
the Company determines the estimated selling price for the re
allocates arrangement consideration based upon the estimated

The application of the multiple element guidance require
individual deliverables, and whether such deliverables are sep
considered separate units of accounting provided that: (1) the
arrangement includes a general right of return relative to the d

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Notes to F

2. Summary of Significant Accounting Policies (continued

delivery or performance of the undelivered item(s) is conside
units of accounting, management evaluates certain criteria, in
of the relevant facts and circumstances for each arrangement,
collaboration partner and the availability of the associated exp
collaboration partner can use the other deliverable(s) for their
of the deliverable is dependent on the undelivered item(s) and
Arrangement consideration that is fixed or determinable is all
method, and the applicable revenue recognition criteria, as de
the appropriate period or pattern of recognition.

The Company determines the estimated selling price for
(VSOE) of selling price, if available, third-party evidence (TP
selling price (BESP) if neither VSOE nor TPE is available. Su
estimate the selling price of the deliverables. Determining the
BESP for a unit of accounting, the Company considers applic
were contemplated in negotiating the agreement with the cust
by evaluating whether changes in the key assumptions used to
consideration between multiple units of accounting.

The Company typically receives up-front, non-refundabl
collaboration agreement. When management believes the lice
deliverables to be provided in the arrangement, the Company
the contractual or estimated performance period, which is typ
obligations. The Company continually evaluates these periods
management believes the license to its intellectual property ha
license upon delivery.

Research and development funding is recognized as reve
the principal under its collaboration agreements, it records pa
cost-sharing revenue in the statements of operations and comp
collaborator for costs incurred, the Company records these co

The Company's agreements may contain options which p
considered substantive if, at the inception of the arrangement,
exercise the option. Factors considered in evaluating whether

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Notes to F

2. Summary of Significant Accounting Policies (continued

arrangement, the benefit the collaborator might obtain from th
likelihood that the option will be exercised. For arrangements
the item underlying the option to be a deliverable at the incep
arrangement consideration, assuming the option is not priced
an option is not considered substantive or if an option is price
underlying the option to be a deliverable at the inception of th
arrangement consideration.

Effective January 1, 2011, the Company adopted ASU N
inception of each arrangement that includes milestone payme
substantive and at-risk. This evaluation includes an assessmer
performance to achieve the milestone, or (2) the enhancement
least in part from the entity's performance to achieve the mile
consideration is reasonable relative to all of the deliverables a
the scientific, regulatory, commercial, and other risks that mu
investment required to achieve the respective milestone, and
payment terms in the arrangement in making this assessment.
are met and the milestone is deemed substantive and at-risk, t
milestones that are not deemed substantive and at-risk, where
over the remaining service period.

Sales and commercial milestones and royalties will be re

Contract Manufacturing Revenue

Contract manufacturing revenue is recognized upon deli
when transfer of title and risk of loss occurs.

Research and Development Expenses

Research and development costs are charged to expense
and development costs include all direct costs, including salar
outside consultants, costs of clinical trials, sponsored research
to the development of drug candidates. The Company records
made in advance of services performed or goods being delive
are delivered.

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Notes to F

2. Summary of Significant Accounting Policies (continued

Certain research and development projects are, or have b
activities are included in research and development costs. The
these agreements as revenue, as more fully described above a

Stock-Based Compensation

At December 31, 2012, the Company had one stock-base
accounts for stock-based compensation in accordance with th
which requires the recognition of expense related to the fair v
comprehensive income (loss).

For stock options issued to employees and members of t
value of each option using the Black-Scholes option-pricing m
make assumptions with respect to the expected term of the op
of the option, risk-free interest rates and expected dividend yi
the Company recognizes stock-based compensation expense,
straight-line basis over the requisite service period, which is g
service-based vesting conditions, the Company recognizes sto
probable that the performance condition will be achieved. For
subsequent periods if actual forfeitures differ from those estim

Share-based payments issued to non-employees are reco
and are recognized as expense over the related service period
stock-based awards granted to non-employees, the Company
method.

See Note 11 for a discussion of the assumptions used by
Black-Scholes option pricing model, as well as a summary of
the year ended December 31, 2012.

Income Taxes

Income taxes are recorded in accordance with ASC Topi
and liability approach. The Company recognizes deferred tax
been included in the financial statements or tax returns. Defer
financial statement and tax bases of assets and liabilities using
reverse. Valuation allowances are provided, if based upon the
deferred tax assets will not be realized.

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Notes to F

2. Summary of Significant Accounting Policies (continued

The Company accounts for uncertain tax positions in acc
Company recognizes the tax benefit of tax positions to the ex
whether the tax benefit will more likely than not be realized i
available facts and circumstances. As of December 31, 2011 a

Net Income (Loss) Per Share

Net income (loss) per share information is determined us
stock outstanding during the period and other securities that p
convertible preferred stock are participating securities as defi

Under the two-class method, basic net income (loss) per
(loss) applicable to common stockholders by the weighted-av
income (loss) per share is computed using the more dilutive o
net income first to preferred stockholders based on dividend r
common stockholders based on ownership interests. Net losse
share in the Company's net losses.

Diluted net income (loss) per share gives effect to all pot
shares issuable upon the exercise of outstanding warrants and
2012, the Company has excluded the effects of all potentially
redeemable convertible preferred stock, warrants for common
of common shares outstanding as their inclusion in the compu

The following common stock equivalents were excluded
because including them would have had an anti-dilutive effec

	Year Ended December 31,	
	2011	2012
Outstanding stock options		3,73
Common stock warrants	874	88
Preferred stock		18,16
Preferred stock warrants		24
	874	23,02

Comprehensive Income (Loss)

Comprehensive income (loss) is defined as the change in
circumstances from non-owner sources. Comprehensive

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Notes to F

2. Summary of Significant Accounting Policies (continued

income (loss) consists of net income (loss) and other compreh
from net income (loss). Comprehensive income (loss) has bee
income (loss) and equals the Company's net income (loss) for

Subsequent Events

The Company considers events or transactions that occu
provide additional evidence relative to certain estimates or to

Application of New or Revised Accounting Standa

On April 5, 2012, the Jump-Start Our Business Startups
among other things, reduce certain reporting requirements for
has elected to not take advantage of the extended transition pe
standards, and as a result, will comply with new or revised ac
required for non-emerging growth companies.

Recently Adopted Accounting Pronouncements

From time to time, new accounting pronouncements are
as of the specified effective date. Unless otherwise discussed,
effective will not have a material impact on its financial posit

3. Property and Equipment, Net

Property and equipment, net, consists of the following (i

Computer equipment and software	$
Office equipment	
Laboratory equipment	
Leasehold improvements	
Construction in progress	
Total property and equipment	
Accumulated depreciation and amortization	
Property and equipment, net	$

Depreciation and amortization expense was $3.1 million

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Notes to F

4. Restricted Cash

As of December 31, 2011 and 2012, the Company maint
account as collateral for the Company's facility lease obligati

5. Accrued Expenses

Accrued expenses consist of the following (in thousands

	Decemb 2011
Collaboration expense	$ 1,042
Research and development related	570
Employee compensation	1,963
Professional services	368
Other	570
	$ 4,513

6. Warrants

Below is a summary of the number of shares issuable up
outstanding warrants (in thousands, except per share data):

	Warrants December 31, 2011	Dec
Warrant to purchase Series A Preferred Stock	107	
Warrants to purchase Series B Preferred Stock	32	
Warrants to purchase Series C-1 Preferred Stock	46	
Warrants to purchase Series D-1 Preferred Stock	64	
Warrants to purchase common stock	872	
Warrants to purchase common stock	13	
All warrants	1,134	

(1) On February 6, 2013, the warrant holder exercised a warra
of 47 shares of Series A Preferred Stock.

(2)

Warrants to purchase common stock were issued in conne
December 31, 2011. See discussion below for further deta

In connection with various financing transactions that we warrants for the purchase of up to 106,500 shares of the Com 31,891 shares of the Company's Series B redeemable convert Series C-1 redeemable convertible preferred stock (Series C- convertible preferred stock (Series D-1 Preferred Stock). Eac Series B Preferred Stock expire seven years from the original Preferred Stock expire ten years from the original date of issu exercise price

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Notes to F

6. Warrants (continued)

equal to the original issuance price of the underlying instrume
settlement basis and the redemption provisions are outside the
and/or Series B Preferred Stock and/or Series C-1 Preferred S
warrants to purchase shares of the Company's preferred stock

The Company follows the provisions of ASC Topic 480,
Shares that Are Redeemable, which requires that warrants to
value of the warrants is remeasured to the then-current fair va
(expense), net. For the years ended December 31, 2011 and 2
purchase shares of the Company's preferred stock, using curre
$0.4 million, respectively, which was recorded in other expen
(loss). The Company will continue to re-measure the fair valu
Preferred Stock, Series C-1 Preferred Stock, and Series D-1 P
expiration of the applicable warrants or until such time that th

In December 2012, the Company modified the warrant t
date from December 21, 2012 to February 28, 2013. On Febru
in the issuance of 46,668 shares of Series A Preferred Stock.
the resulting increase in fair value of $0.1 million as other exp

In connection with the Series E redeemable convertible p
June 2010 and July 2010, the Company issued warrants to pu
exercisable and expires ten years from the original date of iss
exercise price equal to the estimated fair value of the underlyi
exercisable on either a physical settlement or net share settlem
requiring an adjustment to the number of shares in the event t
common stock, at a price per share lower than the warrant exe
to be classified as liabilities under ASC Topic 815, *Derivative*
measured at fair value, with changes in fair value recognized
comprehensive income (loss) for each reporting period therea
preferred stock issued of $3.0 million, and the preferred stock
Company remeasured the fair value of the outstanding warran
and $1.9 million, respectively, which was recorded in other ex
(loss) for the years ended December 31, 2011 and 2012. The
the warrants to

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Notes to F

6. Warrants (continued)

purchase common stock at the end of each reporting period u
March 31, 2013, the Company retired 13,994 warrants to purc
All remaining outstanding warrants were fully vested and exe

In connection with various financing transactions that w
warrants to purchase up to 12,634 shares of common stock. T
equity instruments. The warrants are exercisable at any time t
using the Black-Scholes option-pricing model, and was charg

The Company issued warrants to purchase up to 41,388
consulting services provided by a third party pursuant to stan
warrants vested upon achievement of four milestones and we
year ended December 31, 2011, the holder exercised 41,388 w
shares of common stock. There were no exercises, cancellatio

Fair Value

The fair value of the warrants to purchase preferred stoc
purchase preferred stock classified as liabilities, is estimated u
using inputs such as the fair value of the Company's various c
of the warrants, risk free interest rates, and dividend yields. T
on each re-measurement date for those warrants to purchase c
simulation framework, which incorporated three future financ
to the nature of these inputs and the valuation techniques utili
considered a Level 3 measurement (Note 2).

The fair value of each warrant to purchase shares of the
pricing model with the following assumptions:

	Year Decem
	2011
Fair value of underlying instrument	$ 6.76
Expected volatility	66.0%
Expected term (in years)	1.16
Risk-free interest rate	0.12%
Expected dividend yield	

(1) During December 2012, the expiration date of the warrant
2013. The warrant to purchase Series A Preferred Stock w

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Notes to F

6. Warrants (continued)

The fair value of each warrant to purchase shares of the pricing model with the following assumptions:

	Year Decem
	2011
Fair value of underlying instrument	$ 7.56
Expected volatility	66.0%
Expected term (in years)	1.98
Risk-free interest rate	0.25%
Expected dividend yield	

The fair value of each warrant to purchase shares of the option pricing model with the following assumptions:

	Year Decem
	2011
Fair value of underlying instrument	$ 8.84
Expected volatility	66.0%
Expected term (in years)	7.46
Risk-free interest rate	1.35%
Expected dividend yield	

The fair value of each warrant to purchase shares of the option pricing model with the following assumptions:

	Year Decem
	2011
Fair value of underlying instrument	$ 8.84
Expected volatility	66.0%
Expected term (in years)	8.22
Risk-free interest rate	1.62%
Expected dividend yield	

Fair Value of Underlying Instrument

The Company estimated the fair value of its shares of Se Series D-1 Preferred Stock as of December 31, 2011 and 201

Expected Volatility

The Company estimated the expected volatility based on publicly-traded equity securities. The Company calculated the period of the expected term of the associated award. The com the industry, and with historical share price information suffic volatility would decrease the fair value of the underlying instr

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Notes to F

6. Warrants (continued)

Expected Term

The Company based the expected term on the actual rem
would decrease the fair value of the underlying instrument.

Risk-Free Interest Rate

The Company estimated the risk-free interest rate in refe
with the expected term of the associated award. A decrease in
instrument.

Expected Dividend Yield

The Company estimated the expected dividend yield bas
expectations. The Company has not historically declared or p
future, but instead expects to retain any earnings to invest in t
expected dividend yield of 0.0%.

7. Commitments and Contingencies

Operating Leases

The Company leases its facilities under non-cancelable o
leases contain escalating rent clauses, which require higher re
over the term of the lease, including any rent-free periods. In
recorded these incentives as deferred rent, which is amortized
approximately $3.6 million and $3.5 million were incurred du

Future annual minimum lease payments as of December

2013	$ 4,522
2014	4,522
2015	4,106
2016	3,938
2017	3,938
2018	2,953
Total	$ 23,979

In February 2011, the Company entered into a sublease a
lease from February 28, 2011 until May 30, 2015. The Compa

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Notes to F

7. Commitments and Contingencies (continued)

Future annual minimum sublease payments as of Decem

2013	$ 583
2014	583
2015	241
Total	$ 1,407

Legal Proceedings

On October 18, 2012, the Salk Institute for Biological St
County, alleging that the Company breached one of the Comp
provides the Company with a license with respect to certain o
that, under the licensing agreement, the Company owed Salk
agreement with Shire AG regarding ACE-031 and a share of
received under its ongoing collaboration agreement with Celg
interest in payment and a 15% share of future development m
The Company contends that no additional amounts are due to
applicable Salk license agreement.

The Company moved to dismiss the complaint on Decen
March 14, 2013, Acceleron answered the complaint and asser
removed the action on March 28, 2013 to the United States D
agreement on a stipulation as to certain patent issues raised in
scheduling conference on May 30, 2013, and the parties have
The Company intends to defend its position vigorously.

The Company evaluated the suit under ASC Topic 450,
shall be accrued if information available before the financial s
date of the financial statements, and the amount of loss can be
unfavorable outcome is not probable, it has not established a

The Company's estimates can be affected by various fact
possible. Although the Company believes it would successful
discussions with Salk. Accordingly, the Company has estimat
$10.5 million plus interest.

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Notes to F

7. Commitments and Contingencies (continued)

Other

The Company is also party to various agreements, princi
milestones not met at December 31, 2012, or royalties on futu
agreements are expected to be payable in the immediate futur

The Company enters into standard indemnification agree
indemnifies, holds harmless, and agrees to reimburse the inde
Company's business partners or customers, in connection with
by any third party with respect to the Company's products. Th
execution of the agreement. The maximum potential amount
indemnification agreements is unlimited. The Company has n
indemnification agreements.

8. Redeemable Convertible Preferred Stock

As of December 31, 2012 the authorized capital stock of
share, of which: (1) 26,069,980 shares have been designated a
Preferred Stock, (3) 11,923,077 shares have been designated a
have been designated as Series C-1 Preferred Stock, (5) 955,4
(Series D Preferred Stock), (6) 2,802,548 shares have been de
as Series E Preferred Stock, and (8) 9,704,756 shares have be
Stock, and all collectively the Preferred Stock).

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Notes to F

8. Redeemable Convertible Preferred Stock (continued)

The Company's Preferred Stock consisted of the followi

Series A Preferred Stock, $0.001 par value: 26,069,980 share
outstanding at December 31, 2011 and 2012 and 6,457,644 sh
Series B Preferred Stock, $0.001 par value: 16,944,378 shares
outstanding at December 31, 2011 and 2012, at redemption va
Series C Preferred Stock, $0.001 par value: 11,923,077 shares
outstanding at December 31, 2011 and 2012, at redemption va
Series C-1 Preferred Stock, $0.001 par value: 2,014,652 share
December 31, 2011 and 2012, at redemption value
Series D Preferred Stock, $0.001 par value: 955,414 shares au
December 31, 2011 and 2012, at redemption value(2)
Series D-1 Preferred Stock, $0.001 par value: 2,802,548 share
December 31, 2011 and 2012, at redemption value
Series E Preferred Stock, $0.001 par value: 3,662,422 shares
at December 31, 2011 and 2012, at redemption value(2)
Series F Preferred Stock, $0.001 par value: 9,704,756 shares a
December 31, 2011 and 2012, at redemption value(2)
Total redeemable convertible preferred stock

(1) On February 6, 2013, the warrant holder exercised a warra issuance of 46,668 shares of Series A Preferred Stock.

(2) On March 13, 2013, the Company retired 139,741 shares Series D Preferred Stock, 13,103 shares of Series E Prefer shares from an investor.

The holders of the Company's Preferred Stock have righ

Dividends

The holders of the Company's Preferred Stock are entitle at the rate of 8% per share per annum of the stated value there whether or not earned or declared, and whether or not in any in such fiscal year. No dividends or other distributions will be Preferred Stock have been paid. Additionally, if the Board de the same time, a dividend to the holders of the Preferred equa had been converted into shares of common stock. No dividen

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Notes to F

8. Redeemable Convertible Preferred Stock (continued)

Liquidation

In the event of any liquidation, dissolution, or winding u
Preferred Stock are entitled to receive an amount equal to the
accrued or declared but unpaid, or (b) an amount per share as
immediately prior to the liquidation event. No payment shall
Series D-1 and Series E Preferred Stock or common stock unl

After payment has been made to the holders of Series F
amount equal to the greater of (a) the Special Series E Liquid
or (b) an amount per share as would have been payable had e
event. No payment shall be made to the holders of Series A, S
stock unless and until full payment has been made to the hold

The Special Series E Liquidation Payment is equal to a p
investment amount of $12.56 per share from the date of issua

After payment has been made to the holders of Series F
are entitled to receive an amount equal to the greater of (a) $1
declared but unpaid, or (b) an amount per share as would hav
to the liquidation event. No payment shall be made to the hol
unless and until full payment has been made to the holders of

After payment has been made to the holders of Series F,
Series C-1 Preferred Stock are entitled to receive an amount e
Series C-1 Preferred Stock and $10.40 per share, subject to ap
declared but unpaid, or (b) an amount per share as would hav
to the liquidation event. No payment shall be made to the hol
payment has been made to the holders of Series C and Series

After payment has been made to the holders of Series F,
of Series B Preferred Stock are entitled to receive, an amount
any dividends accrued or declared but unpaid, or (b) an amou
stock immediately prior to the liquidation event. No payment
and until full payment has been made to the holders of Series

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Notes to F

8. Redeemable Convertible Preferred Stock (continued)

After payment has been made to the holders of Series F, the holders of Series A Preferred Stock are entitled to receive (a) $4.00 per share, subject to appropriate adjustment, plus an have been payable had each share been converted to common holders of common stock unless and until full payment has be

The remaining assets of the Company available for distri Series C, Series C-1, Series B and Series A Preferred Stock sh

Voting

The holders of the Preferred Stock are entitled to vote, to for a vote. The holders of the Preferred Stock are entitled to th share of the Preferred Stock is convertible at the time of such Preferred Stock are entitled to separate votes.

Conversion

Voluntary

Each share of Preferred Stock is convertible at the option dividing $4.00 in the case of Series A Preferred Stock, $7.40 in the case of Series C-1 Stock, $12.56 in the case of Series D case of Series F Stock by the conversion prices in effect at the Preferred Stock is 1:1, but is subject to adjustment in the futu

Mandatory

Each share of Preferred Stock shall be automatically con conversion, upon (1) the closing of an IPO of the Company's certain dilutive events, and which results in gross proceeds of

Each share of Preferred Stock shall be automatically con conversion, upon (1) the closing of an IPO of the Company's for certain dilutive events, and which results in gross proceed of the outstanding shares of the respective series of Series B P Preferred Stock, and Series F Preferred Stock, voting as a sing

Each share of Preferred Stock shall be automatically con conversion, upon (1) the closing of an IPO of the Company's dilutive events, and

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Notes to F

8. Redeemable Convertible Preferred Stock (continued)

which results in gross proceeds of at least $50.0 million, and
Series B Preferred Stock, and (3) the election by the holders
Preferred Stock, Series D Preferred Stock, Series E Preferred

In the event of a closing of an IPO of the Company's co
of at least two thirds of the outstanding shares of the respecti
Stock, Series E Preferred Stock, and Series F Preferred Stock
converted into shares of common stock at the conversion pric

In the event of an automatic conversion of the Preferred
adjusted for certain dilutive events, each share of Series E Pre
shares which would be received under the conversion price in
or (2) a ratio determined by dividing the Special Series E Liq
price per share of the Company's common stock in an IPO.

Special Mandatory

In the event that any holder of shares of Preferred Stock
aggregate, in such Qualified Financing and within the time pe
shares of preferred stock will automatically convert into comm

The Company evaluated each series of its Preferred Stoc
815. In making this determination, the Company's analysis fo
the entire preferred stock instrument which includes that featu
characteristics and risks of each series of Preferred Stock. Mo
terms and features, including: (1) whether the Preferred Stock
exercised, (3) whether the holders of Preferred Stock were en
and nature of any conversion rights. As a result of the Compa
feature of all series of Preferred Stock is considered to be clea
Accordingly, the conversion feature of all series of Preferred

The Company accounts for potential beneficial conversio
Options. At the time of each of the issuances of Preferred Sto
Stock is convertible had an estimated fair value less than the
value on the respective commitment dates.

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Notes to F

8. Redeemable Convertible Preferred Stock (continued)

As noted above, in certain events, the Series E Preferred formula driven by the date on which the Company completes the provisions of ASC 470, that as the changes to the convers control, this represents a contingent conversion option, and, th Company evaluated whether a beneficial conversion feature r triggering event occurs, measured based on the number of sha multiplied by the commitment date fair value of the common assessment, the Company determined that no beneficial conv

Redemption

The Company shall be required to redeem all, but not les three equal installments at the written election of holders of 8 date that is 90 days before the fifth anniversary of the original 2016. The redemption price per share of Series F Preferred St Redemption Price) adjusted for certain dilutive events, plus a redemption date, plus (2) an additional amount computed sim simple interest of 10% per annum from the date of issuance o

After full redemption of the Series F Preferred Stock, the shares of the Series E Preferred Stock, in three equal installm Preferred Stock at any time on or after the date that is 90 days Preferred Stock. The redemption price per share of Series E P Series E Base Redemption Price) adjusted for certain dilutive applicable redemption date, plus (2) an additional amount cor equal to simple interest of 10% per annum from the date of is

After full redemption of the Series F and Series E Prefer outstanding shares of the Series D and Series D-1 Preferred S 85% of the outstanding shares of Series D and Series D-1 Pre anniversary of the original issue date of the Company's Series be equal to (1) $12.56 for the Series D and D-1 Preferred Stoc dividends accrued or declared but unpaid on such share on the interest payable on the Series D Base

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Notes to F

8. Redeemable Convertible Preferred Stock (continued)

Redemption Price at the rate equal to simple interest of 10% p

After full redemption of the Series F, Series E, Series D, not less than all, of the outstanding shares of the Series C Pre holders of two-thirds of the outstanding shares of Series C an the fifth anniversary of the original issue date of the Company (1) $10.40 in the case of Series C Preferred Stock and $10.92 adjusted for certain dilutive events, plus all dividends accrued additional amount computed similar to interest payable on the annum from the date of issuance of such shares.

After full redemption of the Series F, Series E, Series D, required to redeem all, but not less than all, of the outstanding the written election of holders of two-thirds of the outstanding before the fifth anniversary of the original issue date of the C (1) $7.40 for the Series B Preferred Stock (the Series B Base declared but unpaid on such share on the applicable redemptio Series B Base Redemption Price at the rate equal to simple in

After full redemption of the Series F, Series E, Series D, be required to redeem all, but not less than all, of the outstand at the written election of holders of two-thirds of the outstand before the fifth anniversary of the original issue date of the C (1) $4.00 for the Series A Preferred Stock (the Series A Base or declared but unpaid on such share on the applicable redem Series A Base Redemption Price at the rate equal to simple in

As the Preferred Stock may become redeemable upon an classified outside of permanent equity.

9. Common Stock

As of December 31, 2012, the authorized capital stock o share.

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Notes to F

9. Common Stock (continued)

General

The voting, dividend and liquidation rights of the holder preferences of the holders of the Preferred Stock. The commo

Voting

The holders of shares of common stock are entitled to or written actions in lieu of meetings.

Dividends

The holders of shares of common stock are entitled to re declared or paid to holders of shares of common stock until p terms. No dividends have been declared or paid by the Comp

Liquidation

After payment to the holders of shares of Preferred Stoc to share ratably in the Company's remaining assets available f liquidation, dissolution or winding up of the Company or upo

Reserved for Future Issuance

There were 2,393,458 and 2,432,155 common shares iss has reserved for future issuance the following number of shar

Conversion of Series A Preferred Stock	
Conversion of Series B Preferred Stock	
Conversion of Series C Preferred Stock	
Conversion of Series C-1 Preferred Stock	
Conversion of Series D Preferred Stock	
Conversion of Series D-1 Preferred Stock	
Conversion of Series E Preferred Stock	
Conversion of Series F Preferred Stock	
Warrants to purchase Preferred Stock	
Outstanding stock options to purchase common stock	
Shares available for future issuance under stock option plan	
Warrants to purchase common stock	
Additional shares reserved for unissued, but designated, Prefe	
Total shares of authorized common stock reserved for future i	

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Notes to F

10. Significant Agreements

Celgene

Overview

On February 20, 2008 the Company entered into a collab
Corporation (Celgene) relating to sotatercept. On August 2, 2
with Celgene for ACE-536 (the ACE-536 Agreement), and al
Celgene exclusive licenses for Sotatercept and ACE-536 in al
compounds. Celgene is a global biopharmaceutical company
innovative therapies designed to treat cancer and immune-infl

Sotatercept Agreement

Under the terms of the Sotatercept Agreement, the Comp
commercialization of sotatercept. The Company also granted
the agreement, the Company and Celgene will jointly develop
nonrefundable, upfront license and option payments to the Co

The Company retained responsibility for research, devel
clinical supplies for these trials. These activities were substan
myelodysplastic syndromes (MDS), chronic kidney disease, a
additional Phase 2 clinical trials, and will be responsible for c
contract manufacturing organizations. Under the agreement, t
regulatory milestones of up to $272.0 million, and commercia
triggered upon initiation of a defined phase of clinical researc
acceptance of the marketing application and upon the approva
other global regulatory authorities. Commercial milestone pay
defined levels of net sales by Celgene in countries outside of
Company would be entitled to receive tiered royalty payment
geographies. Royalty payments are subject to certain reductio

Additionally, for three named discovery-stage option pro
clinical milestones of up to $53.3 million, regulatory milestor
each option program. Clinical milestone payments are trigger
Regulatory milestone payments are triggered upon the accept
candidate by the FDA or other global regulatory authorities. C

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Notes to F

10. Significant Agreements (continued)

product reaches certain defined levels of net sales by Celgene
license of any of the option programs by Celgene. In addition
entitled to receive tiered royalty payments in the low-to-mid t
payments are subject to certain reductions, including for entry
has advanced to the stage to achieve payment of a milestone.

In connection with entering into the Sotatercept Agreem
aggregate purchase price of $5.0 million. The Series C-1 Pref
the time of purchase. In the event that the Company's IPO res
in a private offering concurrently with the IPO, shares of com
gross proceeds from the IPO are greater than $50.0 million or
$50.0 million.

Commensurate with the execution of the ACE-536 Agre
the Sotatercept Agreement. The modified terms included: (1)
Agreement, with Celgene responsible for more than half of th
thereafter, (2) future contingent development milestones for s
with potential future clinical milestones of $27.0 million and
indications) structure and, (3) future contingent development
non-oncology) structure with potential future clinical milesto
four-category (various cancer indications) structure, and (4) a
with a one-time $25.0 million payment on or prior to January
December 31, 2012, the Company has received $34.2 million
the original and modified agreements. The next likely clinical
Phase 2b clinical trial in chronic kidney disease.

The Sotatercept Agreement will expire on a country-by-
royalty term with respect to all license products in such count
option compound. The royalty term for each licensed product
commercial sale of the applicable licensed product in the appl
a specified period of years. The royalty term for each licensed
in North America and ending, on a licensed product and coun
has ceased. The term for each option compound runs for a spe
compound becomes a licensed product, or forfeits its option b
in early clinical development of the option compound.

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Notes to F

10. Significant Agreements (continued)

Celgene has the right to terminate the agreement with res
45 days' notice if the licensed product has failed to meet certa
The agreement may also be terminated in its entirety by eithe
the event of a bankruptcy filing of the other party. There are n
material financial consequences to the Company.

ACE-536 Agreement

Under the terms of the ACE-536 Agreement, the Compa
commercialization of ACE-536. The Company also granted C
application for the treatment of anemia. Celgene paid $25.0 m

The Company retains responsibility for research, develop
manufacturing the clinical supplies for these studies. Celgene
manufacture ACE-536 for the Phase 1 and Phase 2 clinical tri
commercial supplies by third party contract manufacturing or
$32.5 million, regulatory milestones of up to $105.0 million a
receive additional, lower development, regulatory, and comm
Celgene exercises an option. Clinical milestone payments are
candidate. Regulatory milestone payments are triggered upon
therapeutic candidate by the FDA or other global regulatory a
pharmaceutical product reaches certain defined levels of net s
ACE-536 is commercialized, the Company would be entitled
sales from sales generated from all geographies. Royalty payn
the market. Through December 31, 2012, the Company has re
for ACE-536. The next likely clinical milestone payment wou
β-thalassemia. The Company has not yet identified additional
Company will generate future value from additional programs

The ACE-536 Agreement will expire on a country-by-co
royalty term with respect to all license products in such count
each country outside North America is the period commencin
country and ending on the latest of expiration of specified pat
product in North America is the period commencing with the

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Notes to F

10. Significant Agreements (continued)

country-by-country basis on the date which commercializatio
date on which no development or commercialization activitie
ACE-536 Agreement; (2) the date on which no development
licensed products under the Sotatercept Agreement and all op
option compound where Celgene has made a payment with re
ACE-536 Agreement and the Sotatercept Agreement has ende
compounds under the ACE-536 Agreement are in clinical dev
either exercised or forfeited.

Celgene has the right to terminate the ACE-536 Agreem
notice (or 45 days' notice if the licensed product has failed to
activities), provided that Celgene may not terminate the ACE
and ACE-536 MDS Phase 2 clinical trials, except under certa
Celgene or the Company in the event of a material breach by
cancellation, termination or refund provisions in this arranger

Both Agreements

The Company and Celgene shared development costs un
January 1, 2013, Celgene is responsible for paying 100% of v
for all commercialization costs worldwide. The Company has
agreements in North America. Celgene's option to buy down
Company will receive tiered royalties in the low-to-mid twen
sotatercept and ACE-536 are the same.

Accounting Analysis

Prior to 2011, the Company accounted for the Sotatercep
amendments of ASU 2009-13). The Company identified the f
compound, (2) right to license option program compounds, (3
commercialization committee and (5) research and developm
since the Company could not establish VSOE for the undeliv
consisting of the $45.0 million of nonrefundable upfront licen
delivered, which was initially estimated to be 15 years. As of
$34.7 million of deferred revenue under the arrangement.

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Notes to F

10. Significant Agreements (continued)

As a result of the material modifications to the cost shari
Company concluded the modification represented a significan
updated provisions of ASU 2009-13 subsequent to the modifi

Because the ACE-536 Agreement and the amendment to
Company had not yet completed all of its obligations pursuan
for accounting purposes. The deliverables under the combined
ACE-536, (2) performance of research and development servi
of manufacturing services to provide clinical material to Celg
treatment of anemia represents a substantive option. The Com
modulate anemia and Celgene is not contractually obligated t
exercise the option.

All of these deliverables identified in the arrangement w
separate units of accounting under ASC 605-25. Factors cons
licenses, the nature of the research and development services,

The total arrangement consideration of $77.7 million und
(1) the $25.0 million up-front payment for the license of ACE
$34.7 million, and (3) estimated payments for development ac
for each of the undelivered elements as the Company did not
considered its development plan for the compounds, expected
than half of development expenses through December 31, 201
undelivered elements under the arrangements as of the arrang

$18.8 million for research and developme

$2.9 million for the sotatercept joint deve

$3.7 million for the ACE 536 joint develo

$2.8 million for the manufacturing servic

After determining BESP of the undelivered elements, the
arrangements. The difference between the estimated payment
using BESP, for undelivered elements was $10.2 million. Thi
elements are delivered, using the proportional performance m

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Notes to F

10. Significant Agreements (continued)

During 2011, the Company achieved a $7.5 million clini in a multiple-dose clinical trial. The Company evaluated the r uncertainty to achieving the milestone upon execution of the based on the allocation of arrangement consideration determi Agreement. Based on this allocation, the Company recognize recognized as revenue as the undelivered elements are deliver Company achieved a $7.0 million clinical milestone under its clinical trial. The Company evaluated the milestone and deem ASU 2010-17 and, accordingly, recognized the $7.0 million p 2013, the Company achieved a $10.0 million clinical milestor Phase 2 clinical trial. The Company evaluated the milestone a included in ASU 2010-17. The remaining development milest substantive and consistent with the definition of a milestone i related to the achievement of such milestones, if any, when su scientific and regulatory risks that must be overcome to achie milestone, and the monetary value attributed to each milestor $54.8 million and $2.0 million, respectively, of the total defer operations and comprehensive income (loss).

Pursuant to the terms of the agreement, Celgene and the than half of the costs for sotatercept and ACE-536 until Dece from Celgene with respect to research and development costs Company to Celgene for research and development costs incu years ended December 31, 2011 and 2012 the Company recor includes payments to Celgene of $2.8 million and $2.8 millio

Other Agreements

Shire License

In September 2010, the Company entered into a license a manufacture and commercialize ActRIIB compounds in territ manufacture commercial supplies in North America for ActR initial development plan, the companies share the costs associ Dystrophy. In September 2010, Shire

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Notes to F

10. Significant Agreements (continued)

made a nonrefundable, up-front license payment to the Comp
prior to the adoption of ASU 2009-13, the up-front license pa
three years, which represented the original period over which
manufacturing services. On February 8, 2011, the FDA place
deliverables under the license agreement and estimated the ne
accounting estimate with the remaining deferred revenue of $
research and development and manufacturing services. In Ap
ACE-031 and Shire sent the Company a notice of termination
2013. At December 31, 2012, the Company had classified the
of the termination of the Shire Agreement in the second quart
deferred revenue from upfront non-refundable payments rece
the Shire Agreement. During the years ended December 31, 2
of the up-front, non-refundable payments as license and miles
income (loss).

The agreement also included contingent milestone paym
and commercial milestones of $228.8 million for ActRIIB co
and consistent with the definition of a milestone included in A
achievement of such milestones, if any, when such milestone
regulatory risks that must be overcome to achieve the milesto
monetary value attributed to each milestone.

Pursuant to the terms of the agreement, Shire and the Co
ACE-031 and 55% of the costs for licensed compounds other
costs incurred by the Company are recorded as cost-sharing r
incurred by Shire are recorded as a reduction to cost-sharing
recorded net cost-sharing revenue of $4.1 million and $2.7 mi
$0.7 million, respectively, which are recorded as contra-rever

Alkermes License

In December 2009, the Company entered into a Collabor
proprietary technology platform for extending the circulating
Company an up-front cash payment of $2.0 million in Decem
estimated research and development term. In addition, Alkerm

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Notes to F

10. Significant Agreements (continued)

636,942 shares of Series D-1 Preferred Stock at a per share pr
Company determined that the price of $12.56 paid by Alkerm
Preferred Stock of $10.24 as calculated by the Company in its
premium of $1.5 million as additional license revenue on a str
discontinued development of the compounds being investigat
remaining $2.4 million of the up-front payment as revenue, as

As the principal in the collaboration, Acceleron recogniz
year ended December 31, 2011, the Company recognized net
periods.

ImmunoGen Services Agreement

In October 2010, the Company entered into a Biopharma
and manufacture an ImmunoGen product. The Company dete
proportional performance method. Accordingly, the Company
associated with the services were charged to operations as inc
recorded revenue of $1.7 million for the year ended Decembe

Other

The Company entered into a license agreement with a no
license to certain patents developed by the institution (Primar
non-sub-licensable license for Secondary Licensed Products.
common stock to the institution, the fair value of which was $
Company also agreed to pay specified development milestone
In addition, the Company is obligated to pay milestone fees b
revenue ranging from 10%-25%, as well as a royalty ranging
2011 and 2012, the Company paid and expensed milestones a
The Company also paid $0.5 million and zero in 2011 and 20
recorded as research and development expense.

The Company entered into another license agreement wi
license to certain patents developed by the individuals. The C
aggregating up to $1.0 million relating to the development an
royalties in the low single-digits on worldwide net product sa
period of time after patent expiration. If the Company sublice

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Notes to F

10. Significant Agreements (continued)

sublicensing revenue, excluding payments based on the level December 31, 2011 and 2012, the Company did not reach any or expensed.

During 2012, the Company executed a license agreemen royalty-bearing license. The Company is obligated to pay dev Under the agreement, if the Company uses the inventors in th milestones shall change to $0.8 million plus any waived miles well as royalties of 1.5% of net sales on any products develop not reach any milestones defined under the agreement and, th

11. Stock-Based Compensation

The Company's 2003 Stock Option and Restricted Stock awards, and restricted stock to employees, officers, directors, December 31, 2012, the total number of shares of common st options available for future grant was 119,542 at December 3 shareholders

The Company has not granted unrestricted stock awards to the estimated fair value of the Company's common stock o Stock options and restricted stock awards typically vest over

Shares of the Company's common stock underlying any settlement of an award to cover the exercise price or tax withh of shares of the Company's common stock, or otherwise term available for issuance under the 2003 Plan. Shares available f Company's common stock or shares of the Company's commo

During 2010, the Company modified the awards of three vested options post termination. The changes ranged from 3.5 and the fair value of the unvested options that were modified years ended December 31, 2011 and 2012, non-employee sto

The Company recognized stock-based compensation exp 2011 and 2012, respectively.

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Notes to F

11. Stock-Based Compensation (continued)

Total compensation cost recognized for all stock-based c
(loss) is as follows (in thousands):

	Year Ended December 31,	
	2011	**201**
Research and development	$ 686	$
General and administrative	741	
	$ 1,427	$ 1,

The fair value of each option issued to employees was es
following weighted-average assumptions (in thousands):

	Year Ended December 31,	
	2011	**2012**
Expected volatility	66.0%	69.0%
Expected term (in years)	6.0	6.0
Risk-free interest rate	1.1%	0.9%
Expected dividend yield	%	

Fair Value of Underlying Instrument

The Company estimates the fair value of its stock-based

Expected Volatility

The Company estimated the expected volatility based on
publicly-traded equity securities. The Company calculated the
period of the expected term of the associated award. The com
the industry, and with historical share price information suffic
volatility would decrease the fair value of the underlying instr

Expected Term

The Company estimates the expected life of its employee
Bulletin (SAB) No. 107, whereby, the expected life equals the
option due to its lack of sufficient historical data.

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Notes to F

11. Stock-Based Compensation (continued)

Risk-Free Interest Rate

The Company estimated the risk-free interest rate in refe
with the expected term of the associated award. A decrease in
instrument.

Expected Dividend Yield

The Company estimated the expected dividend yield bas
expectations. The Company has not historically declared or p
future, but instead expects to retain any earnings to invest in t
expected dividend yield of 0.0%.

Stock Options

The following table summarizes the stock option activity

Outstanding at December 31, 2011	
Granted	
Exercised	
Canceled or forfeited	
Outstanding at December 31, 2012	
Exercisable at December 31, 2012	
Vested and expected to vest at December 31, 2012(2)	

(1) The aggregate intrinsic value is calculated as the differenc
common stock for the options that were in the money at D

(2) This represents the number of vested options at December
on the unvested options outstanding at December 31, 201

During the years ended December 31, 2011 and 2012, th
shares of its common stock, respectively, with a weighted-ave

During the years ended December 31, 2011 and 2012, cu
options, respectively, resulting in total proceeds of $0.2 millio

The aggregate intrinsic value of options exercised during

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Notes to F

11. Stock-Based Compensation (continued)

As of December 31, 2012, there was $4.4 million of unr
to be recognized over a weighted-average period of 2.9 years.

12. 401(k) Savings Plan

In 2004, the Company established a defined-contributio
The 401(k) Plan covers all employees who meet defined mini
their annual compensation on a pretax basis. The Company ha

13. Income Taxes

The Company provides for income taxes under ASC 740
Under this method, deferred tax assets and liabilities are deter
liabilities, and are measured using the enacted tax rates and la

For the years ended December 31, 2011 and 2012, the C

The Company's income (loss) before income taxes was $
respectively, and was generated entirely in the United States.

Deferred taxes are recognized for temporary differences
purposes. The significant components of the Company's defer

Deferred tax assets:	
U.S. and state net operating loss carryforwards	$
Research and development credits	
Deferred revenue	
Accruals and other temporary differences	
Total deferred tax assets	
Less valuation allowance	
Net deferred tax assets	$

The Company has evaluated the positive and negative ev
Company's history of operating losses, the Company has conc
be realized. Accordingly, the Company has provided a full va
valuation allowance increased by $11.2 million during the ye
during the period. The valuation allowance decreased by $14.
of net operating losses during the period.

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Notes to F

13. Income Taxes (continued)

A reconciliation of income tax expense computed at the statements is as follows:

	2
Federal income tax expense at statutory rate	
State income tax, net of federal benefit	
Permanent differences	
Research and development credit	
Other	
Change in valuation allowance	
Effective income tax rate	

As of December 31, 2011 and 2012, the Company had U respectively, which may be available to offset future income t and 2012, the Company also had U.S. state net operating loss available to offset future income tax liabilities and expire at v Company's collaboration agreement with Celgene, the Compa carryforwards in 2011.

As of December 31, 2011 and 2012, the Company had fe $3.8 million, respectively, available to reduce future tax liabil 2012, the Company had state research and development tax c available to reduce future tax liabilities which expire at variou

Under the provisions of the Internal Revenue Code, the r adjustment by the Internal Revenue Service and state tax auth annual limitation in the event of certain cumulative changes i excess of 50 percent, as defined under Sections 382 and 383 o could limit the amount of tax attributes that can be utilized an limitation is determined based on the value of the Company i further affect the limitation in future years. The Company has change in control as defined by Sections 382 and 383 of the I

The Company will recognize interest and penalties relate 2012, the Company had no accrued interest or penalties relate statements of operations and comprehensive income (loss).

For all years through December 31, 2012, the Company activities. This study may result in an adjustment to the

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Notes to F

13. Income Taxes (continued)

Company's research and development credit carryforwards; h
being presented as an uncertain tax position for these two yea
and development credits and, if an adjustment is required, thi
for the research and development credit carryforwards and th

The Company files income tax returns in the United Stat
generally subject to tax examinations for the tax years ended
attribute carryforwards, the tax years in which the attribute w
Service, state or foreign tax authorities to the extent utilized i

14. Long-Term Debt

On June 26, 2009, the Company entered into a Senior Lo
for a total funding commitment of $10.0 million. The Compa
were interest only, and the principal balance plus accrued inte
annum. The Company was not subject to any financial covena
substantially all of the assets of the Company other than intell
In accordance with the 2009 Senior Loan Agreement, the Co
a fair value at issuance of $0.3 million. The fair value of the w
the date of issue was treated as a discount to the debt and accr
2011 and 2012, the outstanding balance under the 2009 Senio

On March 18, 2010, the Company entered into a loan mo
lenders as the 2009 Senior Loan Agreement. The 2010 Loan
$10.0 million. As of December 31, 2011 and 2012, the outsta
zero, respectively. The Company was required to make paym
principal balance plus accrued interest was payable over the r
subject to any financial covenants under this arrangement. Th
of the Company other than intellectual property and certain p
Loan Modification Agreement, the Company issued warrants
issuance of $0.5 million. The fair value of the warrants, whic
was treated as a discount to the debt and accreted to interest e

On June 7, 2012, the Company entered into a loan and s
which the Company received a loan in the aggregate principa
balance under the Loan Agreement in 42 months. The first 12

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Notes to F

14. Long-Term Debt (continued)

are equal monthly installments of principal plus interest. The certain circumstances. The Company did not trigger the requi

Per annum interest is payable at the 8.5%. The Loan Agr cost over the 42 months of loan. The Loan Agreement is also payment. The Company is recording the deferred payment to interest rate is approximately 11.8%. The company is not sub the Company's personal property as of, or acquired after, the

The Loan Agreement defines events of default, including Company's business operations, properties, assets or condition accordance with the terms of the Loan Agreement, or upon th obligations, or upon the collateral under the Loan Agreement The lenders also received a right, to purchase at fair value, up parties of equity securities resulting in at least $5.0 million in December 31, 2012, there have been no events of default und $20.0 million.

At December 31, 2012, future minimum payments relate

Year ending December 31:	
2013	$
2014	
2015	
Less amounts representing interest	
Less Deferred Fee	
Future minimum principal payments	
Less current portion	
Noncurrent financing obligations	$

15. Related Party Transactions

Celgene Corporation (Celgene)

In connection with its entry into the collaboration agreem its Series C-1 Preferred Stock. As part of the Company's June Stock and received warrants to purchase 38,979 shares of com purchased 1,990,446 shares of Series F Preferred Stock. As a equity as of December 31, 2012. Refer to Note 10 for addition

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Notes to F

15. Related Party Transactions (continued)

During the year ended December 31, 2012, the Company arrangement and, as of December 31, 2012, had $10.3 million

The Company recognized revenue from Celgene during

	Year Ended Decembe	
	2011	20
License and milestone	$ 63,607	$
Cost sharing, net	(121)	
	$ 63,486	$

Alkermes

One of the Company's directors is also the Chairman, Pr Alkermes, with which the Company entered into a collaborati

As of December 31, 2012, Alkermes held 695,250 share common stock. For the year ended December 31, 2011, Alker the Company during 2012.

Related-Party Receivable

On January 28, 2008, the Company issued a secured pro chief executive officer of the Company (the CEO). The Note repayable on the earlier of January 28, 2011, or the date prior shares of its common stock. The Note Receivable is secured b 2010, the term was extended until January 28, 2014, or the da covering shares of its common stock.

In November 2012, the Company further modified the te or the company files a registration statement with the SEC on Company evaluated the forgiveness provisions and determine continued to record the Note Receivable as an asset at Decem SEC on August 6, 2013 which triggered the forgiveness of th totaling $0.2 million as compensation expense during 2013.

16. Subsequent Events

The Company has completed an evaluation of all subseq September 5, 2013, to ensure that this filing includes appropri December 31, 2012,

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Notes to F

16. Subsequent Events (continued)

and events which occurred subsequently but were not recogni
events have occurred that require disclosure, except as disclos

On September 4, 2013, the Board approved the followin

A 1-for-4 reverse stock split of the Comp
effective on September 5, 2013. All share
notes have been retroactively revised to re

The adoption of the 2013 Equity Incentiv
1,500,000 shares of common stock under
issuance under the 2003 Plan and (ii) an a
reserved and available for issuance under
lesser of (i) 3,150,000 shares, or (ii) 4% o
immediately preceding December 31st. T
other change in the Company's capitalizat

The adoption of the 2013 Employee Stock
Company's common stock will be availab
common stock during pre-specified purch
of its common stock at the beginning of th
the end of the purchase period. The Board
under the 2013 ESPP, although the initial

On September 4, 2013, the Board also approved for filin
in connection with its IPO, the Restated Certificate of Incorpo
104,013,161 to 175,000,000, to authorize 25,000,000 shares o
references to the previously designated Series Preferred Stock
September 4, 2013.

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A

Co

(amounts in thou

Assets
Current assets:
Cash and cash equivalents
Collaboration receivables (includes related party amounts of $
December 31, 2012, respectively)
Prepaid expenses and other current assets
Total current assets
Property and equipment, net
Restricted cash
Related party receivables
Other assets
Total assets
Liabilities, redeemable convertible preferred stock and st
Current liabilities:
Accounts payable
Accrued expenses (includes related party amounts of $0 and $
December 31, 2012, respectively)
Deferred revenue
Deferred rent
Notes payable, net of discount
Total current liabilities
Deferred revenue, net of current portion
Deferred rent, net of current portion
Notes payable, net of current portion and discount
Warrants to purchase redeemable convertible preferred stock
Warrants to purchase common stock
Total liabilities
Commitments and contingencies (Note 13)
Redeemable convertible preferred stock
Stockholders' equity (deficit):
Undesignated preferred stock, $0.001 par value: 25,000,000 s
outstanding at September 30, 2013; No shares authorized, issu
Common stock, $0.001 par value: 175,000,000 and 104,013,1
and December 31, 2012, respectively; 28,069,579, and 2,432,
September 30, 2013 and December 31, 2012, respectively
Additional paid-in capital
Accumulated deficit
Total stockholders' equity (deficit)

Total liabilities, redeemable convertible preferred stock and s

See accompanying no

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Condensed Statemer

(amounts in

Revenue:	
Collaboration revenue:	
License and milestone	
Cost-sharing, net	
Total revenue(1)	
Costs and expenses:	
Research and development	
General and administrative	
Total costs and expenses	
(Loss) income from operations	
Other (expense) income:	
Other (expense) income, net	
Interest income	
Interest expense	
Total other expense, net	
Net loss	
Comprehensive loss	
Reconciliation of net loss to net loss applicable to common st	
Net loss	
Accretion of dividends, interest, redemption value and issuan convertible preferred stock	
Gain on extinguishment of redeemable convertible preferred	
Net loss applicable to common stockholders basic and dilute	
Net loss per share applicable to common stockholders: (Note	
Basic and diluted	
Weighted-average number of common shares used in comput applicable to common stockholders:	
Basic and diluted	

(1) Includes related party revenue (Note 18) $ 4,270

See accompanying no

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A

Conden

(

Operating Activities	
Net loss	
Adjustments to reconcile net loss to net cash used in operating	
Depreciation and amortization	
Stock-based compensation	
Amortization of debt discount	
Accretion of deferred interest	
Amortization of deferred debt issuance costs	
Change in fair value of warrants	
Gain on retirement of warrants	
Forgiveness of related party receivable	
Changes in assets and liabilities:	
Prepaid expenses and other current assets	
Collaboration receivables	
Related party receivable	
Accounts payable	
Accrued expenses	
Deferred revenue	
Deferred rent	
Net cash used in operating activities	
Investing Activities	
Purchases of property and equipment	
Net cash used in investing activities	
Financing Activities	
Proceeds from issuance of common stock from initial public o	
Proceeds from issuance of common stock from private placem	
Proceeds from long-term debt, net of issuance costs	
Payments of long-term debt	
Payments made to repurchase redeemable convertible preferr common stock	
Proceeds from exercise of stock options and warrants to purch	
Net cash provided by financing activities	
Net increase (decrease) in cash and cash equivalents	
Cash and cash equivalents at beginning of period	
Cash and cash equivalents at end of period	
Supplemental Disclosure of Cash Flow Information:	
Cash paid for interest	

Supplemental Disclosure of Non-Cash Investing and Fina
Accretion of dividends, interest, redemption value, and issuar

Cashless exercise of warrants

Initial public offering costs included in accounts payable and

Reclassification of warrant liability to additional paid-in capit

Conversion of redeemable convertible preferred stock into co

See accompanying n

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Notes to Unaudited

1. Nature of Business

Acceleron Pharma Inc. (Acceleron or the Company) was The Company subsequently changed its name to Acceleron P Cambridge, Massachusetts-based biopharmaceutical company therapeutics for cancer and rare diseases. The Company's rese protein superfamily, a large and diverse group of molecules th coupling its discovery and development expertise, including i engineering and manufacturing capabilities, the Company has numerous innovative protein therapeutics with novel mechani that are currently being studied in 12 ongoing Phase 2 clinical

The Company is subject to risks common to companies i never achieves profitability, the need for substantial additiona dependence on key personnel, protection of proprietary techn

2. Basis of Presentation

The accompanying financial statements have been prepa of America (GAAP). Any reference in these notes to applicab accounting principles as found in the Accounting Standards C Accounting Standards Board (FASB).

The accompanying interim balance sheet as of Septembe nine months ended September 30, 2013 and 2012 and stateme financial data and other information disclosed in these notes r unaudited interim financial statements have been prepared on ended December 31, 2012, and, in the opinion of managemen the fair presentation of the Company's financial position as of and nine months ended September 30, 2013 and 2012.

The results for the nine months ended September 30, 20 December 31, 2013, any other interim periods, or any future y the audited financial statements as of and for the year ended D Prospectus that forms a part of the Company's Registration St and Exchange Commission (the SEC) pursuant to Rule 424(b

On September 24, 2013 the Company completed its initi stock (including 837,000 shares of common stock sold by

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Notes to Unaudited Interi

2. Basis of Presentation (continued)

the Company pursuant to the full exercise of an overallotmen
share. The shares began trading on the Nasdaq Global Select
Company from the offering were $86.8 million, net of underw
Company. Upon the closing of the IPO, all outstanding shares
and warrants exercisable for convertible preferred stock were
stock, resulting in the reclassification of the related convertib
Additionally, the Company is now authorized to issue 175,00
stock.

On September 24, 2013 the Company also completed the
Corporation at the IPO price of $15.00 per share concurrent w
the Company from the concurrent private placement were $10

On August 23, 2013, the board of directors (the Board) a
the Company's outstanding common stock, which was effecte
reverse stock split will receive a cash payment in lieu of recei
have been retroactively adjusted to give effect to this reverse
equity instruments were proportionately reduced and the resp
with the terms of the agreements governing such securities.

The accompanying condensed financial statements reflec
elsewhere in these notes to the financial statements. As of Sep
which are detailed in the Company's Prospectus, have not cha

3. Use of Estimates

The preparation of financial statements in conformity wi
reported amounts of assets and liabilities, the disclosure of co
amounts expensed during the reporting period. Actual results

Management considers many factors in selecting approp
assumptions that are used in the preparation of these financial
addition, other factors may affect estimates, including: expect
assumptions used in developing estimates, and whether histor
often may yield a range of potentially reasonable estimates of
within that range of reasonable estimates. This process may re
preparation of the financial statements if these results differ fr
accurate, even if such assumptions are reasonable when made

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Notes to Unaudited Interi

3. Use of Estimates (continued)

management used significant estimates in the following areas determination of the fair value of stock-based awards, the fair the Company's net deferred tax assets and related valuation al

The Company utilized significant estimates and assumpt IPO. The Board determined the estimated fair value of the Co including external market conditions affecting the biotechnol convertible preferred stock, the superior rights and preference of achieving a liquidity event, such as an IPO or sale of the C

4. Segment Information

Operating segments are identified as components of an e evaluation by the chief operating decision maker, or decision performance. The Company's chief operating decision maker Company's operations and manage its business as one operati States. The Company does use contract research organization expenses are subject to collaboration reimbursement which is comprehensive loss.

5. Cash and Cash Equivalents and Restricted cash

The Company considers all highly liquid investments pu equivalents. Cash and cash equivalents include cash held in b are carried at cost, which approximates their fair market value letters of credit totaling $0.9 million held in the form of a mo credit cards.

6. Concentrations of Credit Risk and Off-Balance Sheet R

The Company has no off-balance sheet risk, such as fore Financial instruments that potentially subject the Company to and accounts receivable. The Company maintains its cash and institutions that management believes are creditworthy. The C and financial instruments and defines allowable investments t

The Company routinely assesses the creditworthiness of material losses related to receivables from individual custome require collateral. Due to

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Notes to Unaudited Interi

6. Concentrations of Credit Risk and Off-Balance Sheet R

these factors, no additional credit risk beyond amounts provid
accounts receivable.

7. Fair Value Measurements

ASC Topic 820, *Fair Value Measurement* (ASC 820), es
distinguishes between assumptions based on market data (obs
Observable inputs are inputs that market participants would u
independent of the Company. Unobservable inputs are inputs
would use in pricing the asset or liability, and are developed b

ASC 820 identifies fair value as the exchange price, or e
transfer a liability in an orderly transaction between market pa
measurements, ASC Topic 820 establishes a three-tier fair va

Level 1 Quoted market prices in active m

Level 2 Inputs other than Level 1 inputs
rates, and yield curves.

Level 3 Unobservable inputs developed
market participant would use.

To the extent that the valuation is based on models or inp
value requires more judgment. Accordingly, the degree of jud
instruments categorized in Level 3. A financial instrument's le
significant to the fair value measurement.

Items measured at fair value on a recurring basis include
purchase common stock (Note 7). During the periods presente
that are measured at fair value using Level 3 inputs.

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Notes to Unaudited Interi

7. Fair Value Measurements (continued)

The following tables set forth the Company's financial in
financial instrument as of September 30, 2013 and December

Assets:	
Money market funds	
Restricted cash	
Total assets	
Liabilities:	
Warrants to purchase redeemable convertible preferred stock	
Warrants to purchase common stock	
Total liabilities	

Assets:	
Money market funds	
Restricted cash	
Total assets	
Liabilities:	
Warrants to purchase redeemable convertible preferred stock	
Warrants to purchase common stock	
Total liabilities	

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Notes to Unaudited Interi

7. Fair Value Measurements (continued)

The following table sets forth a summary of changes in t
have been classified within Level 3 of the fair value hierarchy
thousands):

	Three Months Ended September 30,		Ni
	2013	**2012**	**2**
Beginning balance	$ 7,390	$ 5,089	$
Change in fair value	11,149	(132)	
Exercises			
Repurchases			
Conversions	(2,013)		
Ending balance	$ 16,526	$ 4,957	$

The money market funds noted above are included in ca
recognizes transfers between levels of the fair value hierarchy
during the nine months ended September 30, 2013 or the year
redeemable convertible preferred stock as described below.

During the three and nine months ended September 30, 2
were converted to warrants to purchase common stock. The re
permanent equity and are no longer required to be measured a

The fair value of the warrants to purchase preferred stock
pricing model at the date of issuance and on each re-measurem
the Company's various classes of preferred stock, stock price
yields. Due to the nature of these inputs, the valuation of the w
of the accounting for the warrants, as well as for a summary o
warrants.

The fair value of warrants to purchase common stock tha
valuation involves using inputs such as the fair value of a sha
Due to the nature of these inputs, the valuation fo the warrant

The Company measures eligible assets and liabilities at f
elected either upon initial recognition of an eligible asset or li
accounting. The Company did not elect to remeasure any of it
any financial assets and liabilities transacted in the nine mont

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Notes to Unaudited Interi

7. Fair Value Measurements (continued)

The Company accounts for uncertain tax positions in acc
Company recognizes the tax benefit of tax positions to the ex
whether the tax benefit will more likely than not be realized i
available facts and circumstances. As of September 30, 2013
positions.

8. Net Loss Per Share

The following common stock equivalents were excluded
including them would have had an anti-dilutive effect (in thou

	Three Months Ended September 30,	
	2013	**2012**
Outstanding stock options	3,667	3,352
Common stock warrants	881	884
Preferred stock	16,658	18,166
Preferred stock warrants	130	248
	21,336	22,650

9. Comprehensive Income (Loss)

Comprehensive income (loss) is defined as the change in
circumstances from non-owner sources. Comprehensive incor
which includes certain changes in equity that are excluded fro
statements of operations and comprehensive income (loss) an

10. Subsequent Events

The Company considers events or transactions that occu
provide additional evidence relative to certain estimates or to
subsequent events and determined that there are no material r

11. Recently Adopted Accounting Pronouncements

From time to time, new accounting pronouncements are
as of the specified effective date. Unless otherwise discussed,
effective will not have a material impact on its financial posit

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Notes to Unaudited Interi

12. Warrants

Below is a summary of the number of shares issuable up
outstanding warrants (in thousands, except per share data):

	Warrants as of	
	September 30, 2013	Decembe 201
Warrant to purchase Series A Preferred Stock		
Warrants to purchase Series B Preferred Stock		
Warrants to purchase Series C-1 Preferred Stock		
Warrants to purchase Series D-1 Preferred Stock		
Warrants to purchase Common Stock	32	
Warrants to purchase Common Stock	46	
Warrants to purchase Common Stock	64	
Warrants to purchase Common stock	858	
Warrants to purchase Common stock	13	
All warrants	1,013	1,

(1) On February 6, 2013, the warrant holder exercised a warra
of 47 shares of Series A Preferred Stock.

(2) Warrants to purchase Series B Preferred Stock, Series C-1
common stock at the closing of the IPO on September 24,

(3) Warrants to purchase common stock were issued in conne
December 31, 2012. See discussion below for further deta

In connection with various financing transactions that w
warrants for the purchase of up to 106,500 shares of the Com
31,891 shares of the Company's Series B redeemable convert
Series C-1 redeemable convertible preferred stock (Series C-
convertible preferred stock (Series D-1 Preferred Stock). Eac
Series B Preferred Stock expire seven years from the original
Preferred Stock expire ten years from the original date of issu
exercise price equal to the original issuance price of the unde
share settlement basis and the redemption provisions are outs
IPO on September 24, 2013, the outstanding warrants to purc

Stock were converted into warrants to purchase common stoc

The Company follows the provisions of ASC Topic 480, *Shares that Are Redeemable*, which requires that warrants to value of the warrants is remeasured to the then-current fair va (expense), net. For the three months ended September 30, 201

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Notes to Unaudited Interi

12. Warrants (continued)

months ended September 30, 2013 and 2012, the Company re
Company's preferred stock up until the conversion of such wa
fair value of $1.0 million, $0.0 million, $1.3 million and $0.0
accompanying statements of operations and comprehensive lo
to purchase preferred shares into warrants to purchase commo
reclassified to permanent equity and therefore, is no longer su

In December 2012, the Company modified the warrant t
date from December 21, 2012 to February 28, 2013. During th
warrant on a net basis, resulting in the issuance of 46,668 sha
value of the warrant and recorded the resulting increase in fai
operations and comprehensive loss for the nine months ended

In connection with the Series E redeemable convertible p
June 2010 and July 2010, the Company issued warrants to pu
exercisable and expires ten years from the original date of iss
exercise price equal to the estimated fair value of the underlyi
exercisable on either a physical settlement or net share settlem
requiring an adjustment to the number of shares in the event t
common stock, at a price per share lower than the warrant exe
to be classified as liabilities under ASC Topic 815, *Derivativ*
measured at fair value, with changes in fair value recognized
comprehensive income (loss) for each reporting period therea
preferred stock issued of $3.0 million, and the preferred stock
the Company remeasured the fair value of the outstanding wa
$10.1 million, ($0.1 million), $11.3 million, and $0.5 million,
of operations and comprehensive loss for the three months en
and 2012. The Company will continue to re-measure the fair
end of each reporting period until the earlier of the exercise o
13,994 warrants to purchase common stock as a consequence
were fully vested and exercisable as of September 30, 2013 a

In connection with various financing transactions that we
warrants to purchase up to 12,634 shares of common stock. T
equity instruments.

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Notes to Unaudited Interi

12. Warrants (continued)

The warrants are exercisable at any time through their respect
Black-Scholes option-pricing model, and was charged to inter

The Company issued warrants to purchase up to 41,388
consulting services provided by a third party pursuant to stand
warrants vested upon achievement of four milestones and wer
no exercises, cancellations, or expirations of warrants during

Fair Value

The fair value of the warrants to purchase preferred stock
purchase preferred stock classified as liabilities, was estimate
using inputs such as the fair value of the Company's various c
of the warrants, risk free interest rates, and dividend yields. T
on each re-measurement date for those warrants to purchase c
simulation framework, which incorporated three future financ
to the nature of these inputs and the valuation techniques utili
considered a Level 3 measurement (Note 7).

13. Commitments and Contingencies

Legal Proceedings

On October 18, 2012, the Salk Institute for Biological St
County, alleging that the Company breached one of the Comp
provides the Company with a license with respect to certain o
that, under the licensing agreement, the Company owed Salk
agreement with Shire AG regarding ACE-031 and a share of
received under its ongoing collaboration agreement with Celg
interest in payment and a 15% share of future development m
The Company contends that no additional amounts are due to
applicable Salk license agreement.

The Company moved to dismiss the complaint on Decem
March 14, 2013, Acceleron answered the complaint and asser
removed the action on March 28, 2013 to the United States D
agreement on a stipulation as to certain patent issues raised in
scheduling conference

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Notes to Unaudited Interi

13. Commitments and Contingencies (continued)

on May 30, 2013, and the parties have begun fact discovery. T
defend its position vigorously.

The Company evaluated the suit under ASC Topic 450,
shall be accrued if information available before the financial s
date of the financial statements, and the amount of loss can be
unfavorable outcome is not probable, it has not established a

The Company's estimates can be affected by various fact
determined a loss is reasonably possible. Although the Compa
participated in settlement discussions with Salk. Accordingly,
and December 31, 2012 to be between $0 and $10.5 million p

Other

The Company is also party to various agreements, princi
milestones not met at September 30, 2013 and December 31,
payments under these agreements are expected to be payable

The Company enters into standard indemnification agree
indemnifies, holds harmless, and agrees to reimburse the inde
Company's business partners or customers, in connection with
by any third party with respect to the Company's products. Th
execution of the agreement. The maximum potential amount
indemnification agreements is unlimited. The Company has n
indemnification agreements.

14. Significant Agreements

Celgene

Overview

On February 20, 2008 the Company entered into a collab
Corporation (Celgene) relating to sotatercept. On August 2, 2
with Celgene for ACE-536 (the ACE-536 Agreement), and al
Celgene exclusive licenses for Sotatercept and ACE-536 in al
compounds. Celgene is a global biopharmaceutical company
innovative therapies designed to treat cancer and immune-infl

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Notes to Unaudited Interi

14. Significant Agreements (continued)

Sotatercept Agreement

Under the terms of the Sotatercept Agreement, the Comp
commercialization of sotatercept. The Company also granted
the agreement, the Company and Celgene will jointly develop
nonrefundable, upfront license and option payments to the Co

The Company retained responsibility for research, devel
clinical supplies for these trials. These activities were substan
myelodysplastic syndromes (MDS), chronic kidney disease, a
additional Phase 2 clinical trials, and will be responsible for c
contract manufacturing organizations. Under the agreement, t
regulatory milestones of up to $272.0 million, and commercia
triggered upon initiation of a defined phase of clinical researc
acceptance of the marketing application and upon the approva
other global regulatory authorities. Commercial milestone pay
defined levels of net sales by Celgene in countries outside of
Company would be entitled to receive tiered royalty payment
geographies. Royalty payments are subject to certain reductio

Additionally, for three named discovery-stage option pro
clinical milestones of up to $53.3 million, regulatory milestor
each option program. Clinical milestone payments are trigger
Regulatory milestone payments are triggered upon the accept
candidate by the FDA or other global regulatory authorities. C
product reaches certain defined levels of net sales by Celgene
license of any of the option programs by Celgene. In addition
entitled to receive tiered royalty payments in the low-to-mid t
payments are subject to certain reductions, including for entry
has advanced to the stage to achieve payment of a milestone.

In connection with entering into the Sotatercept Agreem
aggregate purchase price of $5.0 million. The Series C-1 Pref
the time of purchase. Concurrent with the IPO, Celgene purch

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Notes to Unaudited Interi

14. Significant Agreements (continued)

Commensurate with the execution of the ACE-536 Agre
the Sotatercept Agreement. The modified terms included: (1)
Agreement, with Celgene responsible for more than half of th
thereafter, (2) future contingent development milestones for s
with potential future clinical milestones of $27.0 million and
indications) structure and, (3) future contingent development
non-oncology) structure with potential future clinical mileston
four-category (various cancer indications) structure, and (4) a
with a one-time $25.0 million payment on or prior to January
September 30, 2013, the Company has received $34.5 million
the original and modified agreements. The next likely clinical
Phase 2b clinical trial in chronic kidney disease.

The Sotatercept Agreement will expire on a country-by-
royalty term with respect to all license products in such count
option compound. The royalty term for each licensed product
commercial sale of the applicable licensed product in the appl
a specified period of years. The royalty term for each licensed
in North America and ending, on a licensed product and coun
has ceased. The term for each option compound runs for a spe
compound becomes a licensed product, or forfeits its option b
in early clinical development of the option compound.

Celgene has the right to terminate the agreement with res
45 days' notice if the licensed product has failed to meet certa
The agreement may also be terminated in its entirety by either
the event of a bankruptcy filing of the other party. There are n
material financial consequences to the Company.

ACE-536 Agreement

Under the terms of the ACE-536 Agreement, the Compa
commercialization of ACE-536. The Company also granted C
New Drug application for the treatment of anemia. Celgene p

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Notes to Unaudited Interi

14. Significant Agreements (continued)

The Company retains responsibility for research, develop manufacturing the clinical supplies for these studies. Celgene manufacture ACE-536 for the Phase 1 and Phase 2 clinical tri commercial supplies by third party contract manufacturing or $32.5 million, regulatory milestones of up to $105.0 million a receive additional, lower development, regulatory, and comm Celgene exercises an option. Clinical milestone payments are candidate. Regulatory milestone payments are triggered upon therapeutic candidate by the FDA or other global regulatory a pharmaceutical product reaches certain defined levels of net s ACE-536 is commercialized, the Company would be entitled sales from sales generated from all geographies. Royalty payr the market.

Through September 30, 2013, the Company has received ACE-536. The next likely clinical milestone payment would b β-thalassemia. The Company has not yet identified additional Company will generate future value from additional programs

The ACE-536 Agreement will expire on a country-by-co royalty term with respect to all license products in such count each country outside North America is the period commencin country and ending on the latest of expiration of specified pat product in North America is the period commencing with the country-by-country basis on the date which commercializatio date on which no development or commercialization activitie ACE-536 Agreement; (2) the date on which no development licensed products under the Sotatercept Agreement and all op option compound where Celgene has made a payment with re ACE-536 Agreement and the Sotatercept Agreement has ende compounds under the ACE-536 Agreement are in clinical dev either exercised or forfeited.

Celgene has the right to terminate the ACE-536 Agreem notice (or 45 days' notice if the licensed product has failed to activities), provided that Celgene may not terminate the ACE

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Notes to Unaudited Interi

14. Significant Agreements (continued)

ACE-536 β-thalassemia and ACE-536 MDS Phase 2 clinical entirety by either Celgene or the Company in the event of a m party. There are no cancellation, termination or refund provis Company.

Both Agreements

The Company and Celgene shared development costs un January 1, 2013, Celgene is responsible for paying 100% of v for all commercialization costs worldwide. The Company has agreements in North America. Celgene's option to buy down Company will receive tiered royalties in the low-to-mid twen sotatercept and ACE-536 are the same.

Accounting Analysis

Prior to 2011, the Company accounted for the Sotatercep amendments of ASU 2009-13). The Company identified the f compound, (2) right to license option program compounds, (3 commercialization committee and (5) research and developm since the Company could not establish VSOE for the undeliv consisting of the $45.0 million of nonrefundable upfront licen delivered, which was initially estimated to be 15 years. As of $34.7 million of deferred revenue under the arrangement.

As a result of the material modifications to the cost shari Company concluded the modification represented a significan updated provisions of ASU 2009-13 subsequent to the modifi

Because the ACE-536 Agreement and the amendment to Company had not yet completed all of its obligations pursuan for accounting purposes. The deliverables under the combine ACE-536, (2) performance of research and development serv of manufacturing services to provide clinical material to Celg treatment of anemia represents a substantive option. The Com modulate anemia and Celgene is not contractually obligated t exercise the option.

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Notes to Unaudited Interi

14. Significant Agreements (continued)

All of these deliverables identified in the arrangement w separate units of accounting under ASC 605-25. Factors cons licenses, the nature of the research and development services,

The total arrangement consideration of $77.7 million un (1) the $25.0 million up-front payment for the license of ACE $34.7 million, and (3) estimated payments for development a for each of the undelivered elements as the Company did not considered its development plan for the compounds, expected than half of development expenses through December 31, 20 undelivered elements under the arrangements as of the arrang

$18.8 million for research and developme

$2.9 million for the sotatercept joint deve

$3.7 million for the ACE 536 joint develo

$2.8 million for the manufacturing servic

After determining BESP of the undelivered elements, th arrangements. The difference between the estimated payment using BESP, for undelivered elements was $10.2 million. Thi elements are delivered, using the proportional performance m

As noted above, the total arrangement consideration incl identified at the outset of the ACE-536 Agreement and amen reassesses the estimated payments to be received related to th current estimates. The Company accounts for such changes as reflected in the period of change.

During 2011, the Company achieved a $7.5 million clini in a multiple-dose clinical trial. The Company evaluated the r uncertainty to achieving the milestone upon execution of the based on the allocation of arrangement consideration determi Agreement. Based on this allocation, the Company recognize recognized as revenue as the undelivered elements are deliver Company achieved a $10.0 million clinical milestone under it clinical trial. The Company evaluated the milestone and deem

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Notes to Unaudited Interi

14. Significant Agreements (continued)

consistent with the definition of a milestone included in ASU the nine months ended September 30, 2013. The remaining de deemed to be substantive and consistent with the definition of recognize payments related to the achievement of such milest determination included scientific and regulatory risks that mu to achieve each milestone, and the monetary value attributed and the nine months ended September 30, 2013 and 2012, the respectively, of the total deferred revenue as license and mile loss.

Pursuant to the terms of the agreement, Celgene and the than half of the costs for sotatercept and ACE-536 until Dece from Celgene with respect to research and development costs Company to Celgene for research and development costs incu three months ended September 30, 2013 and 2012, and the ni cost-sharing revenue of $3.6 million, $0.8 million, $9.0 millio $0.6 million, zero and $1.9 million, respectively, which were

Other Agreements

Shire License

In September 2010, the Company entered into a license a manufacture and commercialize ActRIIB compounds in territ manufacture commercial supplies in North America for ActR initial development plan, the companies share the costs associ Dystrophy. In September 2010, Shire made a nonrefundable, Company's revenue recognition policy prior to the adoption o will be recognized as revenue ratably over three years, which deliver research and development and manufacturing services re-assessed the duration of its deliverables under the license a adjustment was treated as a change in accounting estimate wi prospectively over the new period of research and developme not to further pursue development of ACE-031 and Shire sent collaboration terminated effective June 30, 2013. At Decembe in the balance sheet. Upon the effectiveness of the terminatio

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Notes to Unaudited Interi

14. Significant Agreements (continued)

Shire Agreement in the second quarter of 2013, the Company upfront non-refundable payments received under the Shire Ag During the three months ended September 30, 2013 and 2012 recognized zero, $1.9 million, $24.3 million and $5.7 million revenue in the accompanying statements of operations and co

The agreement also included contingent milestone paym and commercial milestones of $228.8 million for ActRIIB co and consistent with the definition of a milestone included in A achievement of such milestones, if any, when such milestone regulatory risks that must be overcome to achieve the milesto monetary value attributed to each milestone.

Pursuant to the terms of the agreement, Shire and the Co ACE-031 and 55% of the costs for licensed compounds other costs incurred by the Company are recorded as cost-sharing re incurred by Shire are recorded as a reduction to cost-sharing r months ended September 30, 2013 and 2012, the Company re million, respectively, which includes payments to Shire of zer contra-revenue in the accompanying statements of operations

Other

The Company entered into a license agreement with a no license to certain patents developed by the institution (Primar non-sub- licensable license for Secondary Licensed Products. stock to the institution, the fair value of which was $25,000, a also agreed to pay specified development milestone payments addition, the Company is obligated to pay milestone fees base revenue ranging from 10%-25%, as well as a royalty ranging the three months ended September 30, 2013 and 2012, and the expensed milestones and fees defined under the agreement to

The Company entered into another license agreement wi license to certain patents developed by the individuals. The C aggregating up to

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Notes to Unaudited Interi

14. Significant Agreements (continued)

$1.0 million relating to the development and commercializati
single-digits on worldwide net product sales of dalantercept,
patent expiration. If the Company sublicenses its patent rights
based on the level of sales, profits or other levels of commerc
Company did not reach any milestones defined under the agre

During 2012, the Company executed a license agreemen
royalty-bearing license. The Company is obligated to pay dev
Under the agreement, if the Company uses the inventors in th
milestones shall change to $0.8 million plus any waived miles
well as royalties of 1.5% of net sales on any products develop
the Company did not reach any milestones defined under the

15. Stock-Based Compensation

At September 30, 2013, the Company had two stock-bas

The Company's 2003 Stock Option and Restricted Stock
awards, and restricted stock to employees, officers, directors,
conjunction with the effectiveness of the 2013 Equity Incenti
stock options or other equity-based awards may be granted un

On September 4, 2013, the Company adopted the 2013 E
common stock under the 2013 Plan, which is comprised of (i)
additional 1,344,116 shares. The 2013 Plan provides that the
automatically increase each January 1, beginning in 2014, by
the Company's common stock on the immediately preceding
stock dividend or other change in the Company's capitalizatio
1,500,000 shares were available for issuance under the 2013 E

The Company has not granted unrestricted stock awards
exercise price equal to the estimated fair value of the Compar
the date of grant. Stock options and restricted stock awards ty
of the Board.

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Notes to Unaudited Interi

15. Stock-Based Compensation (continued)

Shares of the Company's common stock underlying any settlement of an award to cover the exercise price or tax withh of shares of the Company's common stock, or otherwise term available for issuance under the 2013 Plan. Shares available f Company's common stock or shares of the Company's comm

Additionally, on September 4, 2013, the company adopte 275,000 shares of the Company's common stock will be avail common stock during pre-specified purchase periods at a pric at the beginning of the purchase period or 85% of the fair ma September 30, 2013, the initial purchase period under the 201

The Company recognized stock-based compensation exp three months ended September 30, 2013 and 2012 and the nin

Total compensation cost recognized for all stock-based c (loss) is as follows (in thousands):

	Three Months Ended September 30,		
	2013	2012	
Research and development	$ 149	$ 137	$
General and administrative	344	196	
	$ 493	$ 332	$

The fair value of each option issued to employees was es following weighted-average assumptions (in thousands):

	Three Months Ended September 30,		Ni Sep
	2013	2012	2013
Expected volatility	%	66.9%	70
Expected term (in years)		6.0	6
Risk-free interest rate	%	0.9%	1
Expected dividend yield	%	%	

Fair Value of Underlying Instrument

The Company estimates the fair value of its stock-based

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Notes to Unaudited Interi

15. Stock-Based Compensation (continued)

Expected Volatility

The Company estimated the expected volatility based on publicly-traded equity securities. The Company calculated the period of the expected term of the associated award. The com the industry, and with historical share price information suffic volatility would decrease the fair value of the underlying instr

Expected Term

The Company estimates the expected life of its employee Bulletin (SAB) No. 107, whereby, the expected life equals the option due to its lack of sufficient historical data.

Risk-Free Interest Rate

The Company estimated the risk-free interest rate in refe with the expected term of the associated award. A decrease in instrument.

Expected Dividend Yield

The Company estimated the expected dividend yield bas expectations. The Company has not historically declared or p future, but instead expects to retain any earnings to invest in t expected dividend yield of 0.0%.

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Notes to Unaudited Interi

15. Stock-Based Compensation (continued)

Stock Options

The following table summarizes the stock option activity
thousands):

Outstanding at December 31, 2012	
Granted	
Exercised	
Canceled or forfeited	
Outstanding at September 30, 2013	
Exercisable at September 30, 2013	
Vested and expected to vest at September 30, 2013(2)	

(1) The aggregate intrinsic value is calculated as the differenc
common stock for the options that were in the money at S

(2) This represents the number of vested options at Septembe
on the unvested options outstanding at September 30, 201

During the nine months ended September 30, 2013, the C
common stock, with a weighted-average grant date fair value

During the nine months ended September 30, 2013, curr
resulting in total proceeds of $50,000.

The aggregate intrinsic value of options exercised during

As of September 30, 2013, there was $3.3 million of unr
to be recognized over a weighted-average period of 2.2 years.

16. Income Taxes

The Company provides for income taxes under ASC Top
is used in accounting for income taxes. Under this method, de
financial reporting and tax bases of assets and liabilities, and
differences are expected to reverse.

For the three and nine months end September 30, 2013 a
benefit.

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Notes to Unaudited Interi

16. Income Taxes (continued)

The Company has evaluated the positive and negative ev
Company's history of operating losses, the Company has conc
be realized. Accordingly, the Company has provided a full va
December 31, 2012.

The Company files income tax returns in the United Stat
tax returns are generally subject to tax examinations for the ta
Company has tax attribute carryforwards, the tax years in whi
Internal Revenue Service, state or foreign tax authorities to th

17. Long-Term Debt

On June 7, 2012, the Company entered into a loan and se
Company received a loan in the aggregate principal amount o
under the Loan Agreement in 42 months. The first 12 paymen
of principal plus interest. The Loan Agreement provided that
Company did not trigger the requirements and began paying p

Per annum interest is payable at the 8.5%. The Loan Agr
cost over the 42 months of loan. The Loan Agreement is also
payment. The Company is recording the deferred payment to
interest rate is approximately 11.8%. The company is not subj
the Company's personal property as of, or acquired after, the

The Loan Agreement defines events of default, including
Company's business operations, properties, assets or condition
accordance with the terms of the Loan Agreement, or upon th
obligations, or upon the collateral under the Loan Agreement
As of September 30, 2013 and December 31, 2012, there have
December 31, 2012, the principal balance outstanding was $1

Table of Contents

Notes to Unaudited Interi

17. Long-Term Debt (continued)

The roll-forward of the notes payable balance during the

Total notes payable (current and long -term portions) balance	
Interest accrued	
Repayment of long-term debt	
Less current portion	

Noncurrent financing obligations as of September 30, 2013

18. Related Party Transactions

Celgene Corporation (Celgene)

In connection with its entry into the collaboration agreen its Series C-1 Preferred Stock. As part of the Company's June Stock and received warrants to purchase 38,979 shares of con purchased 1,990,446 shares of Series F Preferred Stock. In co purchased 666,667 shares of common stock. As a result of the equity as of September 30, 2013 and December 31, 2012, resp agreement.

During the nine months ended September 30, 2013, the C collaboration arrangement and, as of September 30, 2013, had

The Company recognized revenue from Celgene during thousands):

	Three Months Ended September 30,		Nin
	2013	2012	20
License and milestone	$ 638	$ 535	$ 1
Cost sharing, net	3,632	846	
	$ 4,270	$ 1,381	$ 2

Alkermes

One of the Company's directors is also the Chairman, Pr Alkermes, Inc. (Alkermes), with which the Company entered

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Notes to Unaudited Interi

18. Related Party Transactions (continued)

As of December 31, 2012, Alkermes held 695,250 share
common stock. Upon the closing of the IPO on September 24
converted into 718,655 shares of common stock. No research

Related-Party Receivable

On January 28, 2008, the Company issued a secured pro
chief executive officer of the Company (the CEO). The Note
repayable on the earlier of January 28, 2011, or the date prior
shares of its common stock. The Note Receivable was secured
2010, the term was extended until January 28, 2014, or the da
covering shares of its common stock.

In November 2012, the Company further modified the te
or the company files a registration statement with the SEC on
Company evaluated the forgiveness provisions and determine
continued to record the Note Receivable as an asset at Decem
SEC on August 6, 2013 which triggered the forgiveness of th
totaling $0.2 million as compensation expense during the nine

19. Supplementary Financial Data

The following table presents certain unaudited quarterly
2013. This information has been prepared on the same basis a
normal recurring adjustments) necessary to present fairly the

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Notes to Unaudited Interi

19. Supplementary Financial Data (continued)

herein. Net income (loss) per share for all periods presented h
September 5, 2013.

	March 31	F (in
2013:		
Total revenue	$ 15,012	$
Total costs and expenses	(11,876)	
Income (loss) from operations	3,136	
Net income (loss)	1,647	
Basic net income (loss) per share*	$ (0.24)	$
Diluted net income (loss) per share*	$ (0.24)	$
2012:		
Total revenue	$ 3,324	$
Total costs and expenses	(10,257)	
Loss from operations	(6,933)	
Net loss	(7,588)	
Basic net loss per share*	$ (1.50)	$
Diluted net loss per share*	$ (1.50)	$
2011:		
Total revenue	$ 6,260	$
Total costs and expenses	(11,442)	
Income (loss) from operations	(5,182)	
Net income (loss)	(5,725)	
Basic net income (loss) per share*	$ (4.88)	$
Diluted net income (loss) per share*	$ (4.88)	$

(1) The amounts were computed independently for each quart

* Applicable to common stockholders

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2,0

C

Citigroup

P

JP

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INFORMATION

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, oth
connection with the sale of common stock being registered. A
SEC, registration fee, the FINRA filing fee and NASDAQ lis

Item	Am
SEC registration fee	
FINRA filing fee	
Blue Sky fees and expenses	
Printing and engraving expenses	
Legal fees and expenses	
Accounting fees and expenses	
Transfer Agent fees and expenses	
Miscellaneous expenses	
Total	

Item 14. Indemnification of Directors and Officers

Section 145 of the General Corporation Law of the State

A corporation shall have the power to indemnify any per
pending or completed action, suit or proceeding, whether civi
the corporation) by reason of the fact that the person is or was
request of the corporation as a director, officer, employee or a
against expenses (including attorneys' fees), judgments, fines
connection with such action, suit or proceeding if the person a
opposed to the best interest of the corporation, and, with respe
conduct was unlawful. The termination of any action, suit or p
contendere or its equivalent shall not, of itself, create a presum
reasonably believed to be in or not opposed to the best interes
reasonable cause to believe that his conduct was unlawful.

A corporation shall have the power to indemnify any per
pending or completed action or suit by or in the right of the co
or was a director, officer, employee or agent of the corporatio
employee or agent of another corporation, partnership, joint v
and reasonably incurred by him in connection with the defens
manner the person reasonably believed to be in or not oppose
made with respect to any claim, issue or matter as to which su

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only to the extent that the Court of Chancery or the court in w
the adjudication of liability but in view of all the circumstanc
expenses which the Court of Chancery or such other court sha

As permitted by the Delaware General Corporation Law
eliminate the personal liability of our directors for monetary d
exceptions. In addition, our restated certificate of incorporatio
under certain circumstances, including those circumstances in
advance expenses to our officers and directors as incurred in c

We have entered into indemnification agreements with o
those provided under the Delaware General Corporation Law
not intended to deny or otherwise limit third-party or derivati
were entitled to indemnity or contribution under the indemnif
and we would not benefit from derivative recoveries against t
offset by our obligations to the director or officer under the in

The underwriting agreement provides that the underwrite
and controlling persons against certain liabilities, including li
agreement filed as Exhibit 1.1 hereto.

We maintain directors' and officers' liability insurance fo

Item 15. Recent Sales of Unregistered Securities

In the three years preceding the filing of this registration
the Securities Act. Unless otherwise indicated, the following
preferred stock effected on September 5, 2013.

Sales of Capital Stock

On September 24, 2013, we issued 666,667 shares of co
reverse split of our common stock and preferred stock on Sep

On December 22, 2011, we issued 9,704,756 shares of S

On June 10, 2010 and July 9, 2010, we issued 2,660,962
consideration of $8,355,421 and $1,894,585 respectively.

The foregoing issuances of common stock and preferred
1933.

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Conversion of Preferred Stock

On September 24, 2013, we issued 18,516,993 shares of
after giving effect to the 1-for-4 reverse split of our common

The issuance of the common stock upon conversion of th
1933.

Sales of Warrants

On June 10, 2010, in connection with the issuance of our
shares of our common stock.

Sales of warrants were exempt pursuant to Rule 506 and

Grants and Exercises of Stock Options

From January 1, 2013 through September 30, 2013, we g
employees at a weighted-average price of $9.64 per share. Du
of options to purchase such shares of common stock at a weig

In 2012, we granted options to purchase a total of 2,888,
per share. In 2012, we issued 154,791 shares of common stoc
weighted-average price of $1.01 per share.

In 2011, we granted options to purchase a total of 1,336,
per share. In 2011, we issued 378,992 shares of common stoc
weighted-average price of $0.50 per share.

In 2010, we granted options to purchase a total of 4,249,
per share. In 2010, we issued 155,252 shares of common stoc
weighted-average price of $0.56 per share.

Option grants and the issuances of common stock upon e
Securities Act of 1933.

Item 16. Exhibits and Financial Statement Schedules

(a)

Exhibits

Exhibit number	
1.1	Form of Underwriting Agreement
3.1	Restated Certificate of Incorporation (incorporate (001-36065), filed on September 24, 2013)
3.2	Amended and Restated By-laws (incorporated by (001-36065), filed on September 24, 2013)
4.1	Form of Common Stock Certificate (incorporated (333-190417), filed on September 6, 2013)

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Exhibit number	
4.2	Form of Amended and Restated Registration Rigl Registration Statement on Form S-1 (333-190417
4.3	Form of Warrant to Purchase Stock, issued to Ser exhibit 4.3 to the Company's Registration Statem
4.4	Form of Common Stock Warrant Certificate, issu reference to exhibit 4.4 to the Company's Registra
5.1	Opinion of Ropes & Gray LLP
10.1	Form of Director Indemnification Agreement (inc Form S-1 (333-190417), filed on August 7, 2013)
10.2	Form of Amended and Restated Voting Agreeme Statement on Form S-1 (333-190417), filed on Au
10.3	Amended and Restated Right of First Refusal and exhibit 10.3 to the Company's Registration Staten
10.4	Amended and Restated Investor Rights Agreemer Company's Registration Statement on Form S-1 (
10.5	Loan and Security Agreement, dated as of June 7, Valley Bank, MidCap Financial SBIC, LP, and A Registration Statement on Form S-1 (333-190417
10.6+	Collaboration, License and Option Agreement be and amended August 2, 2011 (incorporated by ref (333-190417), filed on September 6, 2013)
10.7+	Amended and Restated License Agreement betwe August 6, 2010 (incorporated by reference to exh on August 7, 2013)
10.8+	Exclusive License Agreement between Beth Israe (incorporated by reference to exhibit 10.8 to the C 2013)
10.9+	Collaboration, License and Option Agreement be (incorporated by reference to exhibit 10.9 to the C September 6, 2013)
10.10	Exclusive License Agreement between Salk Instit (incorporated by reference to exhibit 10.10 to the 2013)

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Exhibit number	
10.11	Amended and Restated License Agreement betwe August 11, 2010 (incorporated by reference to ex filed on August 7, 2013)
10.12	Indenture of Lease between Massachusetts Institu reference to exhibit 10.12 to the Company's Regis
10.13	Acceleron Pharma Inc. 2013 Equity Incentive Pla on Form S-8 (333-192789), filed on December 12
10.14	Form of Acceleron Pharma Inc. Cash Incentive P Statement on Form S-1/A (333-190417), filed on
10.15	Acceleron Pharma Inc. 2003 Stock Option and Re Registration Statement on Form S-1 (333-190417
10.16	Promissory Note by and between Acceleron Phar 2012 (incorporated by reference to exhibit 10.16 August 7, 2013)
10.17	Form of Amended and Restated Employment Agr to exhibit 10.17 to the Company's Registration St
10.18	Form of Amended and Restated Employment Agr reference to exhibit 10.18 to the Company's Regis
10.19	Form of Amended and Restated Employment Agr reference to exhibit 10.19 to the Company's Regis
10.20	Employee Stock Purchase Plan (incorporated by r (333-190417), filed on September 6, 2013)
10.21	Form of Non-statutory Stock Option Agreement u
10.22	Form of Incentive Stock Option Agreement under
21.1	List of Subsidiaries (previously filed)
23.1	Consent of Ernst & Young LLP
23.2	Consent of Ropes & Gray LLP (included in Exhil
24.1	Power of Attorney (previously filed)

+ Portions of this exhibit (indicated by asterisks) have been submitted separately to the SEC.

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(b)

Financial Statement Schedules

Schedules not listed above have been omitted because th
financial statements or notes thereto.

Item 17. Undertakings

The undersigned registrant hereby undertakes to provide
certificates in such denominations and registered in such nam

Insofar as indemnification for liabilities arising under the
persons of the registrant pursuant to the foregoing provisions,
and Exchange Commission such indemnification is against pu
a claim for indemnification against such liabilities (other than
controlling person of the registrant in the successful defense o
person in connection with the securities being registered, the
controlling precedent, submit to a court of appropriate jurisdi
expressed in the Act and will be governed by the final adjudic

The undersigned Registrant hereby undertakes: (1) Tha
information omitted from the form of prospectus filed as part
prospectus filed by the Registrant pursuant to Rule 424(b)(1)
registration statement as of the time it was declared effective.

(2) That for the purpose of determining any liability un
of prospectus shall be deemed to be a new registration statem
that time shall be deemed to be the initial bona fide offering t

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Pursuant to the requirements of the Securities Act of 193
Registration Statement on Form S-1 to be signed on its behalf
Commonwealth of Massachusetts, on January 21, 2014.

Signat

Pursuant to the requirements of the Securities Act, this A
following persons in the capacities and on the dates indicated

Signature
/s/ JOHN L. KNOPF, PH.D.
John L. Knopf, Ph.D.
/s/ KEVIN F. MCLAUGHLIN
Kevin F. McLaughlin
*
Anthony B. Evnin, Ph.D.
*
Jean M. George
*
George Golumbeski, Ph.D.
*
Edwin M. Kania, Jr.

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Signature
*
Tom Maniatis, Ph.D.
*
Terrance G. McGuire
*
Richard F. Pops
*
Joseph S. Zakrzewski
*By: /s/ KEVIN F. MCLAUGHLIN
Kevin F. McLaughlin Attorney-in-Fact

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