GENOCEA BIOSCIENCES, INC.
Form 10-Q
May 09, 2014
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2014

OR

o 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: 001-36289

Genocea Biosciences, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**51-0596811**
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification No.)
100 Acorn Park Drive **Cambridge, Massachusetts** (Address of Principal Executive Offices)	**02140** (Zip Code)

(617) 876-8191

(Registrant s Telephone Number, Including Area Code)

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** x **No** o

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See 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 o	Accelerated filer o
Non-accelerated filer x (Do not check if a smaller reporting company)	Smaller reporting company o

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

As of May 5, 2014, there were 17,324,429 shares of the registrant s Common Stock, par value $0.001 per share, outstanding.

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FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks and uncertainties. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our clinical results and other future conditions. The words anticipate , believe , contemplate , continue , could , estimate , expect , forecast , goal , intend , may , plan , potential , predict , project , should negative of these terms or other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Any forward-looking statements in this Quarterly Report on Form 10-Q reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed in our Annual Report on Form 10-K and other filings with the Securities Exchange Commission (the SEC), including the following:

- the timing of results of our ongoing and planned clinical trials for GEN-003 and GEN-004;
- our estimates regarding the amount of funds we require to complete our two planned Phase 2 clinical trials for GEN-003 and our initiated Phase 1 trial and planned Phase 2a trial for GEN-004;
- our estimate for when we will require additional funding;
- our plans to commercialize GEN-003 and our other vaccine candidates;
- the timing of, and our ability to, obtain and maintain regulatory approvals for our product candidates;
- the rate and degree of market acceptance and clinical utility of any approved product candidate;
- the potential benefits of strategic partnership agreements and our ability to enter into selective strategic partnership arrangements;

- our ability to quickly and efficiently identify and develop product candidates;

- our commercialization, marketing and manufacturing capabilities and strategy;

- our intellectual property position; and

- our estimates regarding expenses, future revenues, capital requirements, the sufficiency of our current and expected cash resources and our need for additional financing.

Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

Information in this Quarterly Report on Form 10-Q that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained industry, business, market or other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

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Genocea Biosciences, Inc.

Form 10-Q

For the Three Months Ended March 31, 2014

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Genocea Biosciences, Inc.

(A Development Stage Company)

Condensed Balance Sheets

(unaudited)

(in thousands, except per share data)

	March 31, 2014	December 31, 2013
Assets		
Current assets:		
Cash and cash equivalents	$ 65,839	$ 12,208
Restricted cash	157	157
Prepaid expenses and other current assets	944	510
Total current assets	66,940	12,875
Property and equipment, net	814	865
Restricted cash	316	158
Other assets	143	1,863
Total assets	$ 68,213	$ 15,761
Liabilities, redeemable convertible preferred stock and stockholders equity (deficit)		
Current liabilities:		
Accounts payable	$ 1,263	$ 2,176
Accrued expenses and other current liabilities	1,483	1,418
Deferred revenue	12	12
Current portion of long-term debt	1,770	861
Current portion of deferred rent	17	26
Total current liabilities	4,545	4,493
Non-current liabilities:		
Long-term debt, net of current portion	8,040	8,933
Accrued interest payable	25	11
Deferred rent, net of current portion	230	237
Warrant to purchase redeemable securities		656
Total liabilities	12,840	14,330
Commitments and contingencies (Note 6)		
Redeemable convertible preferred stock:		
Seed convertible preferred stock, $0.001 par value;		

Authorized 0 and 4,615 shares; Issued and outstanding 0 and 4,615 shares at March 31, 2014 and December 31, 2013, respectively; aggregate liquidation preference of $0 and $3,000 at March 31, 2014 and December 31, 2013, respectively				3,000
Series A redeemable convertible preferred stock, $0.001 par value;				
Authorized 0 and 36,662 shares; Issued and outstanding 0 and 35,577 shares at March 31, 2014 and December 31, 2013, respectively; aggregate liquidation preference of $0 and $23,125 at March 31, 2014 December 31, 2013, respectively				23,125
Series B redeemable convertible preferred stock, $0.001 par value;				
Authorized 0 and 35,099 shares; Issued and outstanding 0 and 34,581 shares at March 31, 2014 and December 31, 2013, respectively; aggregate liquidation preference of $0 and $24,937 at March 31, 2014 and December 31, 2013, respectively				24,937
Series C redeemable convertible preferred stock, $0.001 par value;				
Authorized 0 and 53,276 shares; Issued and outstanding 0 and 52,586 shares at March 31, 2014 and December 31, 2013, respectively; aggregate liquidation preference of $0 and $30,500 at March 31, 2014 and December 31, 2013, respectively				30,500
Stockholders equity (deficit):				
Common stock, $0.001 par value;				
Authorized 191,690 shares; Issued 17,322 and 327 shares at March 31, 2014 and December 31, 2013, respectively; outstanding 17,299 and 303 at March 31, 2014 and December 31, 2013, respectively		17		
Additional paid-in-capital		142,816		
Deficit accumulated during the development stage		(87,460)		(80,131)
Total stockholders equity (deficit)		55,373		(80,131)
Total liabilities, redeemable convertible preferred stock and stockholders equity (deficit)	$	68,213	$	15,761

See accompanying notes to unaudited financial statements.

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Genocea Biosciences, Inc.

(A Development Stage Company)

Condensed Statements of Operations and Comprehensive Loss

(unaudited)

(in thousands, except per share data)

	Three Months Ended, March 31,		The Period from August 16, 2006 (Inception) to March 31,
	2014	2013	2014
Grant revenue	$	$ 259	$ 6,694
Operating expenses:			
Research and development	4,407	3,980	64,529
General and administrative	1,966	810	22,918
Total operating expenses	6,373	4,790	87,447
Loss from operations	(6,373)	(4,531)	(80,753)
Other (expense) income:			
Change in fair value of warrant	(725)	(6)	(557)
Loss on debt extinguishment			(200)
Interest expense, net	(231)	(127)	(1,922)
Other (expense) income	(956)	(133)	(2,679)
Net loss	$ (7,329)	$ (4,664)	$ (83,432)
Comprehensive loss	$ (7,329)	$ (4,664)	$ (83,432)
Reconciliation of net loss to net loss attributable to common stockholders			
Net loss	$ (7,329)	$ (4,664)	$ (83,432)
Accretion of redeemable convertible preferred stock to redemption value	(180)	(395)	(6,094)
Net loss attributable to common stockholders	$ (7,509)	$ (5,059)	$ (89,526)
Net loss per share attributable to common stockholders-basic and diluted	$ (0.76)	$ (17.09)	$ (153.56)
Weighted-average number of common shares used in net loss per share attributable to common stockholders - basic and diluted	9,859	296	583

See accompanying notes to unaudited financial statements.

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Genocea Biosciences, Inc.

(A Development Stage Company)

Condensed Statements of Cash Flows

(unaudited)

(in thousands)

	Three Months Ended, March 31,		The Period from August 16, 2006 (Inception) to March 31,
	2014	2013	2014
Operating activities			
Net loss	$ (7,329)	$ (4,664)	$ (83,432)
Adjustments to reconcile net loss to net cash used in operating activities			
Depreciation and amortization	78	86	1,686
Stock-based compensation	881	63	2,717
Stock issued for services			21
Stock issued for interest			2
Stock issued for license agreement			6
Non-cash interest expense for warrant issuance			509
Change in fair value of warrants liability	725	6	557
Non-cash interest expense	16	10	326
Loss on debt extinguishment			200
Changes in operating assets and liabilities:			
Restricted cash	(158)		(473)
Prepaid expenses and other current assets	(435)	88	(886)
Other long-term assets	723		(1,053)
Accounts payable	(1,095)	(306)	1,049
Deferred revenue			12
Accrued expenses	60	(338)	1,447
Deferred rent	(15)	(39)	248
Accrued interest payable	15	36	25
Net cash used in operating activities	(6,534)	(5,058)	(77,039)
Investing activities			
Purchases of property and equipment	(27)	(335)	(2,501)
Net cash used in investing activities	(27)	(335)	(2,501)
Financing activities			
Proceeds from IPO, net of issuance costs	60,133		60,133
Proceeds from issuance of notes payable and warrants to purchase redeemable preferred stock			4,075
Proceeds from issuance of preferred stock, net			71,348
Proceeds from issuance of long-term debt			15,547
Repayment of long-term debt		(417)	(5,780)
Proceeds from sale of restricted and unrestricted common stock			3

Proceeds from exercise of stock options	26	2	78
Proceeds form the exercise of warrants	33		33
Payments for debt issuance costs			(58)
Net cash provided by (used in) financing activities	60,192	(415)	145,379
Net increase (decrease) in cash and cash equivalents	$ 53,631	$ (5,808)	$ 65,839
Cash and cash equivalents at beginning of period	12,208	11,516	
Cash and cash equivalents at end of period	$ 65,839	$ 5,708	$ 65,839
Supplemental cash flow information			
Cash paid for interest	$ 174	$ 81	$ 1,039
Supplemental disclosure of non-cash financing activities			
Conversion of preferred stock to common stock upon closing of IPO	$ 81,742	$	$ 81,742
IPO closing costs included in accounts payable and accrued expenses	$ 187	$	$ 187
Reclassification of prepaid IPO closing costs from non-current assets to additional paid-in capital	$ 998	$	$ 998
Reclassification of warrants to additional paid-in capital	$ 1,381	$	$ 1,381
Accretion of redeemable convertible preferred stock to redemption value	$ 180	$	$ 6,094
Vesting of restricted stock	$ 3	$	$ 3
Leasehold improvements financed by landlord	$	$	$ 237
Conversion of convertible debt and accrued interest to preferred stock	$	$	$ 4,298

See accompanying notes to unaudited financial statements.

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Genocea Biosciences, Inc.

(A Development Stage Company)

Notes to Condensed Financial Statements

(unaudited)

1. Organization and operations

The Company

Genocea Biosciences, Inc. (the Company) is a clinical stage biopharmaceutical company that was incorporated in Delaware on August 16, 2006 and has a principal place of business in Cambridge, Massachusetts. The Company has two products in clinical development: GEN-003, which is in a Phase 1/2a clinical trial to treat patients with herpes simplex virus type-2 (HSV-2), and GEN-004, which is being developed to prevent infections caused by pneumococcus and is in a Phase 1 clinical trial. The Company also has other product candidates that are currently in preclinical development. The Company developed GEN-003, GEN-004 and its preclinical product candidates using its proprietary platform technology called the AnTigen Lead Acquisition System (ATLAS). The ATLAS proprietary technology platform mimics the human immune response in the laboratory, potentially improving the effectiveness of vaccine discovery and drastically reducing the time needed to create promising vaccines.

The Company is in the development stage and is devoting substantially all of its efforts to product research and development, initial market development, and raising capital. The Company has not generated any product revenue related to its primary business purpose to date and is subject to a number of risks similar to those of other development stage companies, including dependence on key individuals, competition from other companies, the need for development of commercially viable products, and the need to obtain adequate additional financing to fund the development of its product candidates. The Company is also subject to a number of risks similar to other companies in the life sciences industry, including regulatory approval of products, uncertainty of market acceptance of products, competition from substitute products and larger companies, the need to obtain additional financing, compliance with government regulations, protection of proprietary technology, dependence on third parties, product liability, and dependence on key individuals.

As of March 31, 2014, the Company had a deficit accumulated during the development stage of approximately $87.5 million. The Company had cash and cash equivalents of $65.8 million as of March 31, 2014. The Company believes that its existing cash and cash equivalents will be sufficient to fund operations and capital expenditures for at least the next twelve months.

2. Summary of significant accounting policies

Initial Public Offering

On February 10, 2014, the Company closed its initial public offering (IPO) of its common stock, $0.001 par value per share (Common Stock), pursuant to a registration statement on Form S-1, as amended. An aggregate of 5,500,000 shares of Common Stock registered under the registration statement were sold at a price of $12.00 per share. Net proceeds of the IPO were $61.4 million, excluding offering expenses of $2.4 million payable by the Company. In conjunction with this transaction, all shares of the Company s redeemable convertible preferred stock were converted into 11,435,593 shares of common stock, and 96,988 employee and nonemployee performance-based options vested.

Basis of presentation and use of estimates

The accompanying condensed financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP). Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification (ASC) and Accounting Standards Update (ASU) of the Financial Accounting Standards Board (FASB). Certain information and footnote disclosures normally included in the Company s annual financial statements have been condensed or omitted. These interim condensed financial statements, in the opinion of management, reflect all normal recurring adjustments necessary for a fair presentation of the Company s financial position and results of operations for the interim periods ended March 31, 2014 and 2013.

The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the full fiscal year. These interim financial statements should be read in conjunction with the audited financial statements as of and for the year ended December 31, 2013 and the notes thereto which are included in the Company s Annual Report on Form 10-K, as filed with the Securities and Exchange Commission on March 21, 2014.

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The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, the Company s management evaluates its estimates, which include, but are not limited to, estimates related to clinical trial accruals, stock-based compensation expense, warrants to purchase redeemable securities, and reported amounts of revenues and expenses during the reported period. The Company bases its estimates on historical experience and other market-specific or other relevant assumptions that it believes to be reasonable under the circumstances. Actual results may differ from those estimates or assumptions.

The Company utilized significant estimates and assumptions in determining the fair value of its common stock (Common Stock) prior to completion of the IPO. The Company utilized various valuation methodologies in accordance with the framework of the 2004 and 2013 American Institute of Certified Public Accountants Technical Practice Aids, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*, to estimate the fair value of its Common Stock. Each valuation methodology includes estimates and assumptions that require the Company s judgment. These estimates and assumptions include a number of objective and subjective factors, including external market conditions affecting the biotechnology industry sector, the prices at which the Company sold shares of preferred stock, the superior rights and preferences of securities senior to the Company s Common Stock at the time and the likelihood of achieving a liquidity event, such as an initial public offering or a sale of the Company. Significant changes to the key assumptions used in the valuations could result in different fair values of Common Stock at each valuation date and materially affect the financial statements.

Deferred initial public offering costs

Deferred public offering costs, which primarily consist of direct, incremental legal and accounting fees related to the IPO, were capitalized within other assets as of December 31, 2013. The Company incurred $2.4 million in IPO costs and in February 2014, these public offering costs were offset against the proceeds upon completion of the IPO.

Fair value of financial instruments

The Company is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. FASB ASC Topic 820, *Fair Value Measurement and Disclosures*, established a hierarchy of inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the financial instrument based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company s assumptions about the inputs that market participants would use in pricing the financial instrument and are developed based on the best information available under the circumstances. The fair value hierarchy applies only to the valuation inputs used in determining the reported or disclosed fair value of the financial instruments and is not a measure of the investment credit quality. Fair value measurements are classified and disclosed in one of the following three categories:

- Level 1 Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

- Level 2 Valuations based on quoted prices for similar assets or liabilities in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

- Level 3 Valuations that require inputs that reflect the Company s own assumptions that are both significant to the fair value measurement and unobservable.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument s level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Financial instruments measured at fair value on a recurring basis include cash equivalents (Note 3) and warrants to purchase redeemable securities (Note 5).

An entity may elect to measure many financial instruments and certain other items at fair value at specified election dates. Subsequent unrealized gains and losses on items for which the fair value option has been elected will be reported in net loss. The Company did not elect to measure any additional financial instruments or other items at fair value. The Company is also required to disclose the fair value of financial instruments not carried at fair value. The fair value of the Company s long-term debt is determined using current applicable rates for similar instruments as of the balance sheet dates and assessment of the credit rating of the Company. The carrying value of the Company s long-term debt approximates fair value because the Company s interest rate yield is near current market rates. The Company s long-term debt is considered a Level 3 liability within the fair value hierarchy.

Except for the valuation methodology utilized to value the warrants to purchase redeemable securities (Note 5), there have been no changes to the valuation methods utilized by the Company during the three months ended March 31, 2014 and 2013 or the period from August 16, 2006 (inception) through March 31, 2014. The Company evaluates transfers between levels at the end of each reporting period. There were no transfers of financial instruments between levels during the three months ended March 31, 2014 and 2013 or the period from August 16, 2006 (inception) through March 31, 2014.

Reverse stock split

On January 20, 2014, the Board of Directors and stockholders approved a 1-for-11.9 reverse stock split of the Company s Common Stock, which was effected on January 21, 2014. Stockholders entitled to fractional shares as a result of the reverse stock split

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received a cash payment in lieu of receiving fractional shares upon the closing of the IPO. The Company s historical share and per share information were retroactively adjusted to give effect to this reverse stock split. Shares of Common Stock underlying outstanding stock options were proportionately reduced and the respective exercise prices proportionately increased. Shares of Common Stock reserved for future issuance were presented on an as converted basis and the financial statements disclose the adjusted conversion ratios.

3. Cash and cash equivalents

As of March 31, 2014 and December 31, 2013, cash and cash equivalents comprise funds in depository and money market accounts.

The following table presents the cash and cash equivalents carried at fair value in accordance with the hierarchy defined in Note 2 (in thousands):

	Total	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
March 31, 2014				
Cash	$ 1,327	$ 1,327	$	$
Money Market funds, included in cash equivalents	64,512	64,512		
Total	$ 65,839	$ 65,839	$	$
December 31, 2013				
Cash	$ 249	$ 249	$	$
Money Market funds, included in cash equivalents	11,959	11,959		
Total	$ 12,208	$ 12,208	$	$

Cash equivalents have been initially valued at the transaction price and subsequently valued, at the end of each reporting period, utilizing third party pricing services or other market observable data. The pricing services utilize industry standard valuation models, including both income and market based approaches and observable market inputs to determine value. The Company validates the prices provided by its third party pricing services by reviewing their pricing methods and obtaining market values from other pricing sources. After completing its validation procedures, the Company did not adjust or override any fair value measurements provided by the pricing services as of March 31, 2014 and December 31, 2013.

4. Long-Term Debt

In October 2011, the Company entered into a Loan and Security Agreement with a financial institution, which provided for up to $5.0 million in debt financing (Term Loan). The Term Loan provided for a draw-down period on the facility through March 1, 2012. On March 1, 2012, the Company drew down the full $5.0 million available under the terms of this arrangement.

From March 1, 2012 through May 1, 2012, the Company was obligated to make interest-only payments at the greater of the financial institution s prime rate plus 5.00% or 8.00%. The Company began making 36 equal monthly payments of principal and accrued interest thereafter. During the 36-month period, the Term Loan bears interest at the greater of the financial institution s prime rate plus 4.75% or 8.00%. The Company was also obligated to pay 6.50% of the advance on the final repayment date of the draw, which was April 1, 2015. This final payment was accrued over the term of the debt and was recorded in accrued interest payable.

In connection with the Term Loan, the Company issued a fully-exercisable warrant to purchase 517,242 shares of Series B Preferred Stock. Upon closing of the IPO, these Series B Preferred Stock warrants automatically converted into warrants exercisable for 43,465 shares of Common Stock at an exercise price of $6.90 per share (Note 5). The Term Loan is collateralized by all the assets of the Company, except for those assets collateralized by an equipment term loan that was repaid as of December 31, 2013.

On September 30, 2013, the Company entered into a new loan agreement which provided up to $10.0 million in debt financing (New Term Loan). Upon the closing of the New Term Loan, the Company drew down $3.5 million and paid off the remaining balance under the Term Loan. As part of the early repayment, the Company incurred a loss on debt extinguishment of $0.2 million. The New Term Loan provides for a draw-down period on the remaining facility of $6.5 million, which the Company drew down on December 19, 2013. The Company is obligated to make interest-only payments for the first 9 months and 33 equal payments of principal, together with accrued interest thereafter for each advance. The New Term Loan bears interest at a rate of 8% per annum. The Company is also obligated to pay 2% of the advance on the final repayment date of each draw. The final payment is being accrued over the term of the debt and recorded in accrued interest payable on the balance sheets. Should an event of default occur, including the occurrence of a material adverse change, the Company would be liable for immediate repayment of all amounts outstanding, including the 2% final payment associated with each draw. The New Term Loan is collateralized by all the assets of the Company.

In connection with the New Term Loan, the Company issued a warrant to purchase 689,655 shares of Series C Preferred Stock at $0.58 per share. Upon the closing of the IPO, these Series C Preferred Stock warrants automatically converted into warrants exercisable for 57,954 shares of Common Stock at an exercise price of $6.90 per share (Note 5).

Future principal payments on the New Term Loan are as follows (in thousands):

		March 31, 2014
2014	$	924
2015		3,636
2016		3,636
2017		1,804
Total	$	10,000

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5. Warrants

As of December 31, 2013, the Company had outstanding warrants to purchase 2,291,512 shares of redeemable convertible preferred stock. On January 29, 2014, 21,695 warrants to purchase Series A Preferred stock were exercised for cash. On February 4, 2014, an additional 28,926 warrants to purchase Series A Preferred stock were exercised for cash. Prior to the closing of the IPO on February 10, 2014, warrants to purchase 987,840 shares of Series A preferred stock were exercised in a cashless exercise for 316,932 shares of Series A Preferred stock, which automatically converted into 26,633 shares of Common Stock upon the closing of the IPO. Also upon the closing of the IPO, warrants exercisable for 1,253,051 shares of redeemable convertible preferred stock were automatically converted into warrants exercisable for 105,297 shares of Common Stock. On February 12, 2014, 43,465 warrants were exercised in a cashless exercise for 16,593 shares of Common Stock.

The warrants outstanding consist of the following (in thousands):

	March 31, 2014	December 31, 2013
Warrants to purchase Series A Preferred Stock		1,085
Warrants to purchase Series B Preferred Stock		517
Warrants to purchase Series C Preferred Stock		690
Warrants to purchase Common Stock	62	
Total	62	2,292

In connection with the closing of the IPO, all the warrants exercisable for redeemable convertible preferred stock were automatically converted into warrants exercisable for Common Stock, resulting in the reclassification of the related warrant to purchase redeemable securities liability to additional paid-in capital as the warrants to purchase shares of Common Stock are accounted for as equity instruments. The warrant to purchase redeemable securities liability was re-measured to fair value prior to reclassification to additional paid-in capital. As of March 31, 2014, the Company had no outstanding warrant to purchase redeemable securities liability.

The warrant to purchase redeemable securities liability measured at fair value as of December 31, 2013 is as follows (in thousands):

	Total	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
December 31, 2013				
Warrants to purchase redeemable securities	$ 656	$	$	$ 656
Total	$ 656	$	$	$ 656

The following table sets forth a summary of changes in the fair value of the Company s warrants to purchase redeemable securities, which represents a recurring measurement that is classified within Level 3 of the fair value hierarchy wherein fair value is estimated using significant

unobservable inputs (in thousands):

	Three months ended March 31, 2014
Beginning balance	$ 656
Change in fair value	725
Warrants exercised	(323)
Reclassification to equity	(1,058)
Ending balance	$

These warrants are considered Level 3 liabilities because their fair value measurements are based, in part, on significant inputs not observed in the market and reflect the Company s assumptions as to the expected volatility of the Company s Preferred stock. At December 31, 2013, the Company determined the fair value of the warrants to purchase redeemable securities based on input

from management and the Board of Directors, which utilized an independent valuation of the Company s enterprise value, determined utilizing an analytical valuation model. Any reasonable changes in the assumptions used in the valuation could materially affect the financial results of the Company. At December 31, 2013, the analytical valuation model used to calculate the fair value of warrants to purchase redeemable securities was a hybrid approach based on an OPM backsolve method and the PWERM. 35% of the value was attributed to the OPM backsolve method and 65% was attributed to the PWERM. After the enterprise value was determined, the total

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enterprise value was then allocated to the various outstanding equity instruments, including the warrants to purchase redeemable securities, utilizing the OPM.

The fair value of warrants to purchase 21,695 shares of Series A Preferred stock prior to exercise on January 29, 2014 was estimated using the Black-Scholes option pricing model with the following weighted-average assumptions:

		January 29, 2014
Fair value of underlying instrument	$	0.65
Expected Volatility		55.57%
Expected term (in years)		0.04
Risk-free interest rate		1.52%
Expected dividend yield		0.0%

These warrants were re-measured to a fair value of $7,783, which resulted in an increase in fair value of $2,142. The fair value of the warrants was reclassified to additional paid-in capital upon exercise on January 29, 2014.

The fair value of warrants to purchase 28,926 shares of Series A Preferred stock prior to exercise on February 4, 2014 was estimated using the Black-Scholes option pricing model with the following weighted-average assumptions:

		February 4, 2014
Fair value of underlying instrument	$	0.65
Expected Volatility		55.03%
Expected term (in years)		0.02
Risk-free interest rate		1.46%
Expected dividend yield		0.0%

These warrants were re-measured to a fair value of $10,357, which resulted in an increase in fair value of $2,839. The fair value of the warrants was reclassified to additional paid-in capital upon exercise on February 4, 2014.

The fair value of warrants to purchase 987,840 shares of Series A Preferred stock prior to a cashless exercise for 316,932 shares of Series A Preferred stock on February 10, 2014, which automatically converted into 26,633 shares of Common Stock upon the closing of the IPO, was estimated using the Black-Scholes option pricing model with the following weighted-average assumptions:

		February 10, 2014
Fair value of underlying instrument	$	7.74

Expected Volatility	50.81%
Expected term (in years)	0.003
Risk-free interest rate	1.48%
Expected dividend yield	0.0%

These warrants were re-measured to a fair value of $304,423, which resulted in an increase in fair value of $46,581. The fair value of the warrants was reclassified to additional paid-in capital upon exercise on February 10, 2014.

The fair value of warrants exercisable for 1,253,051 shares of redeemable convertible preferred stock, which were automatically converted into warrants exercisable for 105,297 shares of Common Stock, was estimated using the Black-Scholes option pricing model with the following weighted-average assumptions:

	February 10, 2014
Fair value of underlying instrument	$ 6.96
Expected Volatility	92.9%
Expected term (in years)	8.66
Risk-free interest rate	2.43%
Expected dividend yield	0.0%

The fair value of the remaining 105,297 warrants to purchase Common Stock were re-measured to a fair value of $1,058,269, which resulted in an increase in fair value of $673,040. The fair value of the warrants was reclassified to additional paid-in capital upon conversion.

6. Commitments and contingencies

Significant Contracts and Agreements

In August 2006, the Company entered into an agreement to license certain intellectual property from The Regents of the University of California. The agreement required the Company to pay a non-refundable license fee of $25 thousand, and to issue 12,605 shares of Common Stock to the university. Such consideration was recorded in research and development expenses in 2006. The agreement calls for payments to be made by the Company upon the occurrence of a certain development milestone and a certain commercialization milestone for each distinct product covered by the licensed patents, in addition to certain royalties to be paid on marketed products or sublicense income. There were no other research and development expenses associated with this agreement in any of the other financial periods presented.

In November 2007, the Company entered into an agreement to license certain intellectual property from Harvard University. The agreement required the Company to pay a non-refundable license fee of $75 thousand, and to issue 10,773 shares of common stock to the university. Such consideration, which totaled $93 thousand, was recorded in research and development expenses in 2007. The agreement also calls for payments to be made by the Company upon the occurrence of certain development and regulatory milestones, in addition to certain royalties on marketed products or sub-license income. In addition, the Company must make annual maintenance fee payments, which vary depending on the type of products under development. The Company incurred none, none and $266 thousand in annual maintenance fees and clinical milestones to Harvard University for the three months ended March 31, 2014 and 2013 and the period from August 16, 2006 (inception) to March 31, 2014, respectively.

In August 2009, the Company entered into an agreement to license certain intellectual property from Isconova AB, now Novavax. The agreement required the Company to pay a non-refundable license fee of $750 thousand. The Company was also required to pay $200 thousand on the one-year anniversary in 2010. The agreement calls for payments to be made by the Company upon the occurrence of certain development and commercial milestones, in addition to certain royalties to be paid on marketed products or sublicense income. In addition, the Company has entered into a committed funding agreement whereby the Company is obligated to purchase a total of $1.6 million of services on a full-time equivalent basis. These services are expensed as incurred. The Company has expensed none, none and $1.7 million related to these services for the three months ended March 31, 2014 and 2013 and the period from August 16, 2006 (inception) to March 31, 2014, respectively.

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In January 2010, the Company entered into an agreement to license certain intellectual property from the University of Washington. The agreement required the Company to pay a non-refundable license fee of $20 thousand, and to issue 2,100 shares of common stock to the university. These amounts were recorded in research and development expenses in 2010. The agreement also calls for payments to be made by the Company upon the occurrence of certain development and commercial milestones, in addition to certain royalties on marketed products or sublicense income. In addition, the Company must make annual maintenance fee payments, which vary depending on the number of years from the effective date. The Company has expensed $20 thousand, $45 thousand and $110 thousand related to this agreement for the three months ended March 31, 2014 and 2013 and the period from August 16, 2006 (inception) to March 31, 2014, respectively.

Supply agreements

In August 2009, the Company entered into a supply agreement with a third party for the manufacture and supply of antigens used in the Company s product candidates. The agreement calls for payments to be made by the Company upon the occurrence of certain manufacturing milestones, in addition to reimbursement of certain consumables. In June 2013, the Company entered into another supply agreement with the same vendor for the manufacture and supply of antigens to be used in the Company s next clinical trials. The Company has expensed $613 thousand, $70 thousand and $8.1 million related to these agreements for the three months ended March 31, 2014, 2013 and the period from August 16, 2006 (inception) to March 31, 2014, respectively.

In February 2014, the Company entered into a supply agreement with FUJIFILM Diosynth Biotechnologies U.S.A., Inc. (Fujifilm) for the manufacture and supply of antigens for the GEN-003 Phase 2 dose optimization clinical trial. Under the agreement, the Company is obligated to pay Fujifilm manufacturing milestones, in addition to reimbursement of certain material production related costs. Additionally, the Company is responsible for the payment of a reservation fee, which will equal a percentage of the expected production fees, to reserve manufacturing slots in the production timeframe. As of March 31, 2014, the Company has incurred $25 thousand in costs under this agreement.

Restricted cash related to facilities leases

Restricted cash related to facilities leases consisted of the following (in thousands):

	March 31, 2014	December 31, 2013
2012 Facilities Sublease	$ 157	$ 157
2012 Master Facilities Lease	316	158
Total	$ 473	$ 315

At March 31, 2014, the Company has two outstanding letters of credit with a financial institution related to security deposits for the 2012 Facilities Sublease and the 2012 Master Facilities Lease, for a total of $473 thousand, which are secured by cash on deposit. The letter of credit related to the 2012 Facilities Sublease will expire on April 30, 2014.

Litigation

The Company does not believe it is a party to any litigation and does not have contingency reserves established for any litigation liabilities.

7. Redeemable convertible preferred stock

Upon the closing of the IPO on February 10, 2014, all of the outstanding shares of the Company s redeemable convertible preferred stock were converted into 11,435,593 shares of its Common Stock. As of March 31, 2014, the Company does not have any redeemable convertible preferred stock issued or outstanding.

8. Common stock

At March 31, 2014, the Company had authorized 191,689,655 shares of Common Stock, $0.001 par value per share, of which 17,322,144 shares were issued and 17,299,472 were outstanding.

Restricted stock

During 2006 and 2007, the Company s founders and certain employees were issued shares and entered into Stock Restriction and Repurchase Agreements with the Company. During 2013, a director of the Company early exercised stock options and received

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25,262 shares of common stock which were subject to a Stock Restriction and Repurchase Agreement with the Company. Under the terms of the agreements, shares of Common Stock issued are subject to a vesting schedule. Vesting occurs periodically at specified time intervals and specified percentages. All shares of Common Stock become fully vested within four years of the date of distribution. As of March 31, 2014, the Company has issued 31,135 shares of restricted common stock of which 7,463 shares have vested and 22,672 shares are subject to repurchase by the Company.

Reserve for future issuance

The Company has reserved for future issuances the following number of shares of Common Stock (in thousands):

	March 31, 2014	December 31, 2013
Conversion of Seed Preferred Stock		388
Conversion of Series A Preferred Stock		2,990
Conversion of Series B Preferred Stock		3,613
Conversion of Series C Preferred Stock		4,419
Options to purchase common stock	2,647	1,823
Warrants to purchase Series A Preferred Stock	4	91
Warrants to purchase Series B Preferred Stock		43
Warrants to purchase Series C Preferred Stock	58	58
	2,709	13,425

9. Stock-based compensation

The Company s board of directors adopted the 2014 Equity Incentive Plan (the 2014 Equity Plan), which was approved by its stockholders and became effective upon the closing of the IPO on February 10, 2014. The 2014 Equity Plan replaced the 2007 Equity Incentive Plan (the 2007 Equity Plan).

The 2014 Equity Plan provided for the grant of incentive stock options, non-qualified stock options and restricted stock awards to key employees and directors of, and consultants and advisors to, the Company. The maximum number of shares of Common Stock that may be delivered in satisfaction of awards under the 2014 Equity Plan is 903,494 shares, plus 219,765 shares that were available for grant under the 2007 Equity Plan on the date the 2014 Equity Plan was adopted. The 2014 Equity Plan provides that the number of shares available for issuance will automatically increase annually on each January 1st, from January 1st, 2015 through January 1, 2024, in amount equal to the lesser of 4% of the outstanding shares of the Company s outstanding common stock as of the close of business on the immediately preceding December 31st or the number of shares determined the Company s board of directors.

Outstanding options awards granted from the 2007 Equity Plan, at the time of the adoption of the 2014 Equity Plan, remain outstanding and effective. The shares of Common Stock underlying awards that are cancelled, forfeited, repurchased, expire or are otherwise terminated under the 2007 Equity Plan are added to the shares of Common Stock available for issuance under the 2014 Equity Plan. As of March 31, 2014, the number of common shares that may be issued under both equity plans is 2,646,788 and 643,982 remain available for future grants.

Stock Based Compensation Expense

Total stock-based compensation expense is recognized for stock options granted to employees and non-employees and has been reported in the Company s statements of operations as follows (in thousands):

	Three months ended March 31,	
	2014	2013
Research and development	$ 477	$ 18
General and administrative	404	45
Total	$ 881	$ 63

Stock Options

The following table summarizes stock option activity for employees and nonemployees (shares in thousands):

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at December 31, 2013	1,576	$ 2.66	7.64	$ 6,682
Granted	479	$ 12.09		
Exercised	(12)	$ 2.22		
Canceled	(40)	$ 2.27		
Outstanding at March 31, 2014	2,003	$ 4.93	8.00	$ 26,556
Exercisable at March 31, 2014	1,036	$ 2.54	6.92	$ 16,219
Vested or expected to vest at March 31, 2014	1,871	$ 5.07	7.99	$ 24,538

Performance-Based Stock Options

The Company granted stock options to certain employees, executive officers and consultants, which contain performance-based vesting criteria. Milestone events are specific to the Company s corporate goals, which include, but are not limited to, certain clinical development milestones, business development agreements and capital fundraising events. Stock-based compensation expense associated with these performance-based stock options is recognized if the performance conditions are considered probable of being achieved, using management s best estimates. During the three months ended March 31, 2014, the Company determined that 96,988 performance-based milestones were probable of achievement and accordingly, recorded $435 thousand in related stock-based compensation expense. There

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were no such milestones that were considered probable of achievement during the three months ended March 31, 2013, and accordingly, no stock-based compensation related to these milestones was recorded for this period. As of March 31, 2014, there are 56,336 performance-based common stock options outstanding for which the probability of achievement was not deemed probable.

Employee Stock Purchase Plan

In connection with the closing of the Company s IPO on February 10, 2014, the Company s board of directors adopted the 2014 Employee Stock Purchase Plan (the 2014 ESPP). The 2014 ESPP authorizes the initial issuance of up to a total of 200,776 shares of Common Stock to participating eligible employees. The 2014 ESPP provides for six-month option periods commencing on January 1 and ending June 30 and commencing July 1 and ending December 31 of each calendar year. Unless otherwise determined by the administrator of the 2014 ESPP, the first offering will begin on July 1, 2014.

10. Income taxes

Deferred taxes are recognized for temporary differences between the basis of assets and liabilities for financial statement and income tax purposes. The Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets. Based on the Company s history of operating losses, the Company has concluded that it is more likely than not that the benefit of its deferred tax assets will not be realized. There were no significant income tax provisions or benefits for the three months ended March 31, 2014 and 2013. Due to the uncertainty surrounding the realization of the favorable tax attributes in future tax returns, the Company has provided a full valuation allowance against its deferred tax assets.

11. Net loss per share attributable to common stockholders

The Company computes basic and diluted earnings (loss) per share using a methodology that gives effect to the impact of outstanding participating securities (the two-class method). As the three month period ended March 31, 2014 and 2013 and the period from August 16, 2006 (inception) to March 31, 2014 resulted in net losses, there is no income allocation required under the two-class method or dilution attributed to weighted average shares outstanding in the calculation of diluted loss per share.

The following common stock equivalents, presented on an as converted basis, were excluded from the calculation of net loss per share for the periods presented, due to their anti-dilutive effect (in thousands):

	March 31, 2014	March 31, 2013	The period from August 16, 2006 (inception) March 31, 2014
Preferred stock		8,493	

Warrants	62	135	62
Outstanding options	2,003	1,099	2,003
Total	2,065	9,727	2,065

12. Subsequent events

The Company has evaluated all events or transactions that occurred after March 31, 2014. In the judgment of management, there were no material events that impacted the unaudited condensed financial statements or disclosures.

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Item 2. Management s Discussion and Analysis of Financial Condition and Results of Operations

The following information should be read in conjunction with the unaudited financial information and the notes thereto included in this Quarterly Report on Form 10-Q. The following disclosure contains forward-looking statements that involve risk and uncertainties. Our actual results and timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those discussed in our Annual Report on Form 10-K.

Overview

We are a clinical stage biotechnology company that discovers and develops novel vaccines and immunotherapies to address diseases with significant unmet clinical needs. We use our proprietary discovery platform, ATLAS, to rapidly design first-in-class products that act through T cell (or cellular) immune responses, which are increasingly recognized as having potential value to treat or protect against many infectious diseases, cancer, and many autoimmune disorders. In September 2013, we announced human proof-of-concept data for GEN-003, a candidate immunotherapy to treat patients infected with herpes simplex virus-2, or HSV-2. This data represents the first reported instance of a vaccine significantly reducing viral shedding, an indicator of disease activity in HSV-2. We have subsequently demonstrated that response to GEN-003 lasts for six-months and offers a highly significant reduction in clinical symptoms as measured by lesion days. If GEN-003 successfully completes clinical development and is approved, we believe it would represent an important new treatment option for patients with HSV-2. We are also developing a second T cell-enabled product candidate, GEN-004, to prevent infections caused by *Streptococcus pneumoniae* or pneumococcus, a leading cause of infectious disease mortality worldwide.

We commenced business operations in August 2006. To date, our operations have been limited to organizing and staffing our company, acquiring and developing our proprietary ATLAS technology, identifying potential product candidates and undertaking preclinical studies and clinical trials of our product candidates. All of our revenue to date has been grant revenue. We have not generated any product revenue and do not expect to do so for the foreseeable future. We have primarily financed our operations through the issuance of our equity securities, debt financings and amounts received through grants. At March 31, 2014, we had received an aggregate of $158.0 million in gross proceeds from the issuance of equity securities and gross proceeds from debt facilities and an aggregate of $6.7 million from grants. At March 31, 2014, our cash and cash equivalents were $65.8 million.

Since inception, we have incurred significant operating losses. Our net losses were $7.3 million for the three months ended March 31, 2014, and our accumulated deficit was $87.5 million as of March 31, 2014. We expect to incur significant expenses and increasing operating losses for the foreseeable future. Our net losses may fluctuate significantly from quarter to quarter and year to year. We will need to generate significant revenue to achieve profitability, and we may never do so.

On January 20, 2014, the Board of Directors and stockholders approved a 1-for-11.9 reverse stock split of the Company s Common Stock, which was effected on January 21, 2014. Stockholders entitled to fractional shares as a result of the reverse stock split received a cash payment in lieu of receiving fractional shares. The Company s historical share and per share information has been retroactively adjusted to give effect to this reverse stock split. Shares of Common Stock underlying outstanding stock options were proportionately reduced and the respective exercise prices proportionately increased. Shares of Common Stock reserved for future issuance were presented on an as converted basis and the financial statements disclose the adjusted conversion ratios.

We believe that our cash and cash equivalents at March 31, 2014 will enable us to fund our operating expenses and capital expenditure requirements through at least the end of 2015, by which time we expect to have completed our ongoing Phase 1/2a clinical trial and the first of our planned Phase 2 clinical trials for GEN-003 for HSV-2 and our Phase 1 clinical trial and our planned Phase 2a clinical trial for GEN-004 for pneumococcus. However, costs related to clinical trials can be unpredictable and therefore there can be no guarantee that our current balance of cash and cash equivalents and any proceeds received from other sources will be sufficient to fund these studies or our operations through this period. These funds will not be sufficient to enable us to conduct pivotal clinical trials for, seek marketing approval for or commercially launch GEN-003, GEN-004 or any other product candidate. Accordingly, to obtain marketing approval for and to commercialize these or any other product candidates, we will be required to obtain further funding through public

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or private equity offerings, debt financings, collaboration and licensing arrangements or other sources. Adequate additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital when needed would have a negative effect on our financial condition and our ability to pursue our business strategy.

Significant events in the three months ended March 31, 2014:

Completed IPO

- In February 2014, we completed our IPO, issuing 5.5 million shares of Common Stock and raising net proceeds of $61.4 million excluding offering expenses of $2.4 million.

Entered into supply agreement with FUJIFILM Diosynth Biotechnologies U.S.A., Inc. (Fujifilm)

- In February 2014, we entered into a supply agreement with Fujifilm for the manufacture and supply of antigens for our upcoming GEN-003 Phase 2 dose-optimization clinical trial.

Appointment of Jonathan Poole as chief financial officer

- Mr. Poole s deep finance and strategic planning expertise in the biopharmaceutical industry will further strengthen our leadership team as GEN-003 and GEN-004 advance in clinical development.

Status of products in development as of March 31, 2014

GEN-003 for the treatment of HSV-2 infections

GEN-003 is in Phase 1/2a clinical development for the treatment of HSV-2. 12-month data from this trial is expected in mid-2014 and we are currently actively preparing for the initiation of a Phase 2 dose-optimization clinical trial, also in the second quarter of 2014.

GEN-004 for the prevention of pneumococcal infections

GEN-004 is in Phase 1 clinical development to demonstrate the T cell response associated with natural protection against pneumococcus and the trial is fully enrolled. Data from this trial is expected in the second quarter of 2014 and we are currently planning to initiate a Phase 2 clinical trial in the third quarter of 2014 to seek to demonstrate that GEN-004 can reduce pneumococcus colonization in humans.

Products in research and pre-clinical development

We have ongoing pre-clinical development programs in chlamydia and HSV-2 prophylaxis and a research program in malaria.

Financial Overview

Revenue

Grant revenue consists of revenue earned to conduct vaccine development research. We have received grants from a private not-for-profit organization and federal agencies. These grants have related to the discovery and development of several of our product candidates, including product candidates for the prevention of pneumococcus, chlamydia, and malaria. Revenue under these grants is recognized as research services are performed. Funds received in advance of research services being performed are recorded as

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deferred revenue. We plan to continue to pursue grant funding, but there can be no assurance we will be successful in obtaining such grants in the future.

We have no products approved for sale. We will not receive any revenue from any product candidates that we develop until we obtain regulatory approval and commercialize such products or until we potentially enter into agreements with third parties for the development and commercialization of product candidates. If our development efforts for any of our product candidates result in regulatory approval or we enter into collaboration agreements with third parties, we may generate revenue from product sales or from such third parties.

We expect that our revenue will be less than our expenses for the foreseeable future and that we will experience increasing losses as we continue our development of, and seek regulatory approvals for, our product candidates and begin to commercialize any approved products. Our ability to generate revenue for each product candidate for which we receive regulatory approval will depend on numerous factors, including competition, commercial manufacturing capability and market acceptance of our products.

Research and Development Expenses

Research and development expenses consist primarily of costs incurred to advance our preclinical and clinical candidates, which include:

- personnel-related expenses, including salaries, benefits, stock-based compensation expense and travel;

- expenses incurred under agreements with contract research organizations, or CROs, contract manufacturing organizations, or CMOs, consultants and other vendors that conduct our clinical trials and preclinical activities;

- costs of acquiring, developing and manufacturing clinical trial materials and lab supplies; and

- facility costs, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies.

We expense internal research and development costs to operations as incurred. We expense third party costs for research and development activities, such as conducting clinical trials, based on an evaluation of the progress to completion of specific performance or tasks such as patient enrollment, clinical site activations or information, which is provided to us by our vendors.

The following table identifies research and development expenses on a program-specific basis for our product candidates for the three months ended March 31, 2014 and 2013 (in thousands):

	Three Months Ended March 31,	
	2014	2013
HSV-2 (GEN-003)(1)	$ 1,923	$ 1,630
Pneumococcus (GEN-004)(1)	1,411	1,832
Other research and development (2)	1,073	518
Total research and development	$ 4,407	$ 3,980

(1) Includes direct and indirect internal costs and external costs such as CMO and CRO costs.

(2) Includes costs related to other product candidates and technology platform development costs related to ATLAS.

At March 31, 2014, we had incurred an aggregate of $43.8 million in research and development expenses related to GEN-003 and GEN-004 since inception. We expect our research and development expenses will increase as we continue the manufacture of pre-clinical and clinical materials and manage the clinical trials of, and seek regulatory approval for, our product candidates.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for personnel, including stock-based compensation and travel expenses, in executive and other administrative functions. Other general and administrative expenses include facility-related costs, communication expenses and professional fees associated with corporate and intellectual property legal expenses, consulting and accounting services.

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We anticipate that our general and administrative expenses will increase in the future to support the continued research and development of our product candidates and to operate as a public company. These increases will likely include increased costs for insurance, costs related to the hiring of additional personnel and payments to outside consultants, lawyers and accountants, among other expenses. Additionally, if and when we believe a regulatory approval of our first product candidate appears likely, we anticipate that we will increase our salary and personnel costs and other expenses as a result of our preparation for commercial operations.

Interest Expense, Net

Interest expense, net consists primarily of interest expense on our long-term debt facilities and non-cash interest related to the amortization of debt discount and issuance costs, partially offset by interest earned on our cash and cash equivalents.

Other (Expense) Income

Other (expense) income consists of fair value adjustments on warrants to purchase preferred stock.

Accretion of Preferred Stock

Certain classes of our preferred stock were redeemable beginning in 2017 at the original issuance price plus any declared or accrued but unpaid dividends upon written election of the preferred stockholders in accordance with the terms of our articles of incorporation. Accretion of preferred stock reflects the accretion of issuance costs and, for Series B preferred stock, cumulative dividends based on their respective redemption values. On February 10, 2014, we closed our IPO and all shares of preferred stock were converted into 11,435,593 shares of our Common Stock. No accretion of preferred stock will be recorded after this date as no shares of preferred stock will be outstanding.

Critical Accounting Policies and Significant Judgments and Estimates

We believe that several accounting policies are important to understanding our historical and future performance. We refer to these policies as critical because these specific areas generally require us to make judgments and estimates about matters that are uncertain at the time we make the estimate, and different estimates which also would have been reasonable could have been used. The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, we evaluate estimates, which include, but are not limited to, estimates related to clinical trial accruals, stock-based compensation expense, warrants to purchase redeemable securities, and reported amounts of revenues and expenses during the reported period. We base our estimates on historical experience and other market-specific or other relevant assumptions that we believe to be reasonable under the circumstances. Actual results may differ materially from those estimates or assumptions.

The critical accounting policies we identified in our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2013 related to accrued research and development expenses and stock-based compensation. There have been no material changes to our accounting policies from those described in our Annual Report on Form 10-K. It is important that the discussion of our operating results that follows be read in conjunction with the critical accounting policies disclosed in our Annual Report on Form 10-K, as filed with the SEC on March 21, 2014.

Results of Operations

Comparison of the Three Months Ended March 31, 2014 and March 31, 2013

(in thousands)	Three Months Ended, March 31, 2014	2013	Increase (Decrease)
Grant revenue	$	$ 259	$ (259)
Operating expenses:			
Research and development	4,407	3,980	427
General and administrative	1,966	810	1,156
Total operating expenses	6,373	4,790	1,583
Loss from operations	(6,373)	(4,531)	(1,842)
Other income (expense):			
Other income (expense)	(725)	(6)	(719)
Interest expense, net	(231)	(127)	(104)
Other income (expense)	(956)	(133)	(823)
Net loss	$ (7,329)	$ (4,664)	$ (2,665)

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Grant Revenue

Grant revenue was $0 and $259 thousand for the three months ended March 31, 2014 and 2013, respectively. The decrease of $0.3 million was due to the completion of a grant to fund research for our pneumococcus program during 2013.

Research and Development Expenses

Research and development expenses were $4.4 million and $4.0 million for the three months ended March 31, 2014 and 2013, respectively. The increase of $0.4 million was primarily due to increased spending on GEN-003 of $0.3 million as a result of increased costs related to the manufacturing of clinical trials materials, which was partially offset by a reduction in costs related to the Phase 1/2a clinical trial; increased spending on other research and development of $0.6 million as a result of increased employee compensation costs; partially offset by a decrease in spending on GEN-004 of $0.4 million due to a decrease in costs related to the manufacturing of clinical trials materials, which was partially offset by an increase in costs related to the Phase 1 clinical trial.

General and Administrative Expenses

General and administrative expenses were $2.0 million and $0.8 million for the three months ended March 31, 2014 and 2013, respectively. The increase of $1.2 million was primarily due to additional personnel costs in 2014 of $0.2 million, an increase in non-cash stock based compensation of $0.4 million due to the vesting of certain performance-based common stock options, $0.3 million in increased audit and legal expenses and $0.3 million in public company overhead costs.

Other (Expense) Income

Other (expense) income was $0.7 million million for the three months ended March 31, 2014 and de minimis for the same period of 2013, respectively. The increase of $0.7 million was due to an increase in the fair value of our warrants to purchase preferred stock as a result of an increase in the fair value of the underlying stock both before and on the date of the closing of the IPO.

Interest Expense, Net

Interest expense was $0.2 million and $0.1 million for the three months ended March 31, 2014 and 2013, respectively. The increase of $0.1 million was due primarily to higher average principal balances for the first three months of 2014 as compared to the same period in 2013.

Liquidity and Capital Resources

Overview

Since our inception through March 31, 2014, we have received an aggregate of $158.0 million in gross proceeds from the issuance of equity securities and gross proceeds from debt facilities and an aggregate of $6.7 million from grants. At March 31, 2014, our cash and cash equivalents were $65.8 million. In February 2014, we completed an IPO of 5.5 million shares of our Common Stock at a price of $12.00 per share for an aggregate offering price of $66.0 million. We received net proceeds from the offering of approximately $61.4 million, after deducting approximately $4.6 million in underwriting discounts and commission, excluding offering costs payable by us.

Debt Financings

In October 2011 we entered into a Loan and Security Agreement, or the Term Loan, which provided for up to $5.0 million in debt financing. The Term Loan provided for a draw-down period on the loan through March 1, 2012. In March 2012, we drew down the full $5.0 million available through the facility.

From March 1, 2012 through May 1, 2012 we were obligated to make interest-only payments at the greater of (1) the lender s prime rate plus 5.0%, or (2) 8.0%. Thereafter, we were required to make 36 equal monthly payments of principal and accrued interest. During this 36-month period the Term Loan bore interest at the greater of (i) the lender s prime rate plus 4.75% or (ii) 8.0%. We were also obligated to pay 6.5% of the advance on the final repayment date, which was scheduled to be April 1, 2015. In connection with the Term Loan, we issued warrants to purchase 517,242 shares of Series B preferred stock at an exercise price of $0.58 per share. Upon execution of the Term Loan, the warrant to purchase 258,621 shares was immediately exercisable and the remaining warrant to purchase 258,621 shares became exercisable when we drew down the full amount of the loan on March 1, 2012. The $5.0 million term

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loan was collateralized by all of our corporate assets, excluding our intellectual property, and by a negative pledge on our intellectual property.

On September 30, 2013, we entered into a new loan agreement, or the New Term Loan, which provided up to $10.0 million in debt financing. Upon the closing, we drew down $3.5 million and paid off the outstanding principal and interest on the Term Loan. Under the terms of the New Term Loan, we could draw additional advances of up to the remaining $6.5 million through December 31, 2013. On December 19, 2013, we drew down the remaining $6.5 million on the New Term Loan. Each advance shall be repaid in 42 monthly installments. For the first nine months following each advance, we are obligated to make interest only payments. Thereafter, we are required to make 33 equal monthly payments of principal together with interest. On the first business day of the 42nd month, we are also obligated to make a payment equal to 2.0% of the original principal amount of the advance. We may prepay the outstanding principal amount of the New Term Loan at any time. The New Term Loan was collateralized by a blanket lien on all our corporate assets, excluding our intellectual property, and by a negative pledge on our intellectual property. In connection with the New Term Loan, we issued a warrant to purchase 689,655 shares of Series C preferred stock at an exercise price of $0.58 per share. Upon execution of the New Term Loan, the warrant was immediately exercisable to purchase 689,655 shares. Upon completion of the IPO, the warrants became exercisable for an aggregate of 57,954 shares of our common stock at an exercise price of $6.90 per share.

Operating Capital Requirements

Our primary uses of capital are, and we expect will continue to be for the near future, compensation and related expenses, manufacturing costs for pre-clinical and clinical materials, third party clinical trial research and development services, laboratory and related supplies, clinical costs, legal and other regulatory expenses and general overhead costs.

We believe that our existing cash and cash equivalents at March 31, 2014 will be sufficient to fund our operations through at least the end of 2015. We believe that these funds will be sufficient to enable us to obtain clinical data from our ongoing Phase 1/2a clinical trial and planned GEN-003 Phase 2 clinical trials and our Phase 1 clinical trial and planned Phase 2a clinical trial for GEN-004. We expect that these funds will not be sufficient to enable us to seek marketing approval or commercialize any of our product candidates.

We have based our projections of operating capital requirements on assumptions that may prove to be incorrect and we may use all of our available capital resources sooner than we expect. Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amount of our operating capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the timing and costs of our ongoing Phase 1/2a clinical trial and the first of our planned Phase 2 clinical trials for GEN-003 and our Phase 1 clinical trial and planned Phase 2a clinical trial for GEN-004;

- the progress, timing and costs of manufacturing GEN-003 and GEN-004 for current and planned clinical trials;

- the initiation, progress, timing, costs and results of preclinical studies and clinical trials for our other product candidates and potential product candidates;

- the outcome, timing and costs of seeking regulatory approvals;

- the costs of commercialization activities for GEN-003, GEN-004 and other product candidates if we receive marketing approval, including the costs and timing of establishing product sales, marketing, distribution and manufacturing capabilities;

- subject to receipt of marketing approval, revenue received from commercial sales of our product candidates;

- the terms and timing of any future collaborations, grants, licensing, consulting or other arrangements that we may establish;

- the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights, including milestone and royalty payments and patent prosecution fees that we are obligated to pay pursuant to our license agreements;

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- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against intellectual property related claims; and

- the extent to which we in-license or acquire other products and technologies.

We expect that we will need to obtain substantial additional funding in order to commercialize GEN-003, GEN-004 and our other product candidates in order to receive regulatory approval. To the extent that we raise additional capital through the sale of common stock, convertible securities or other equity securities, the ownership interests of our existing stockholders may be materially diluted and the terms of these securities could include liquidation or other preferences that could adversely affect the rights of our existing stockholders. In addition, debt financing, if available, would result in increased fixed payment obligations and may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends, that could adversely affect our ability to conduct our business. If we are unable to raise capital when needed or on attractive terms, we could be forced to significantly delay, scale back or discontinue the development or commercialization of GEN-003, GEN-004 or our other product candidates, seek collaborators at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available, and relinquish or license, potentially on unfavorable terms, our rights to GEN-003, GEN-004 or our other product candidates that we otherwise would seek to develop or commercialize ourselves.

Cash Flows

The following table summarizes our sources and uses of cash for the three months ended March 31, 2014 and 2013 (in thousands):

	Three Months Ended March 31,	
	2014	**2013**
Net cash used in operating activities	$ (6,534)	$ (5,058)
Net cash used in investing activities	(27)	(335)
Net cash provided by (used in) financing activities	60,192	(415)
Net increase (decrease) in cash and cash equivalents	$ 53,631	$ (5,808)

Operating Activities

The increase in net cash used in operations for the three months ended March 31, 2014, as compared to the three months ended March 31, 2013, was due primarily to an increase in the net loss of approximately $2.7 million along with changes in our working capital accounts.

Net cash used in operating activities was $6.5 million for the three months ended March 31, 2014 and consisted primarily of net loss of $7.3 million adjusted for non-cash items including depreciation expense of $0.1 million, stock-based compensation expense of $0.9 million, an increase in the fair value of warrants of $0.7 million and a net decrease in operating assets and liabilities of $0.3 million.

Net cash used in operating activities was $5.1 million for the three months ended March 31, 2013 and consisted primarily of a net loss of $4.7 million adjusted for non-cash items including depreciation expense of $0.1 million, stock-based compensation expense of $0.1 million and a net decrease in operating assets and liabilities of $0.6 million.

Investing Activities

Net cash used in investing activities for the three months ended March 31, 2014 and 2013 were de minimis and $0.3 million, respectively. The use of net cash in all periods primarily resulted from purchases of property and equipment to facilitate our increased research and development activities and headcount.

Financing Activities

Net cash provided by (used in) financing activities for the three months ended March 31, 2014 and 2013 was $60.2 million and ($0.4) million respectively. Cash provided by financing activities for the year ended March 31, 2014 primarily consisted of $60.1 million in net proceeds from our IPO and $0.1 million in proceeds from the exercise of stock options and warrants. Net cash provided by financing activities for the year ended March 31, 2013 consisted primarily of $0.4 million from repayment of long-term debt.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

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Contractual Obligations

There have been no material changes to our contractual obligations from those described in our Annual Report on Form 10-K, as filed with the SEC on March 21, 2014, except as noted below:

In February 2014, the Company entered into a supply agreement with Fujifilm for the manufacture and supply of certain antigens of the Company for its Phase II clinical study. Under the agreement, the Company is obligated to pay Fujifilm manufacturing milestones, in addition to reimbursement of certain production related costs. Additionally, the Company is responsible for the payment of a reservation fee, which will equal a percentage of the expected production fees, to reserve manufacturing slots in the production timeframe. As of March 31, 2014, the Company incurred $25 thousand in costs under this agreement.

Item 3. Quantitative and Qualitative Disclosures about Market Risks

We are exposed to market risk related to changes in interest rates. As of March 31, 2014 and December 31, 2013, we had cash and cash equivalents of $65.8 million and $12.2 million, respectively, consisting of money market funds. The investments in these financial instruments are made in accordance with an investment policy approved by our board of directors which specifies the categories, allocations and ratings of securities we may consider for investment. The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive without significantly increasing risk. Some of the financial instruments in which we invest could be subject to market risk. This means that a change in prevailing interest rates may cause the value of the instruments to fluctuate. For example, if we purchase a security that was issued with a fixed interest rate and the prevailing interest rate later rises, the value of that security will probably decline. To minimize this risk, we intend to maintain a portfolio which may include cash, cash equivalents and investment securities available-for-sale in a variety of securities which may include money market funds, government and non-government debt securities and commercial paper, all with various maturity dates. Based on our current investment portfolio, we do not believe that our results of operations or our financial position would be materially affected by an immediate change of 10% in interest rates.

We do not hold or issue derivatives, derivative commodity instruments or other financial instruments for speculative trading purposes. Further, we do not believe our cash equivalents and investment securities have significant risk of default or illiquidity. We made this determination based on discussions with our investment advisors and a review of our holdings. While we believe our cash equivalents and investment securities do not contain excessive risk, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes in market value. All of our investments are recorded at fair value.

We are also exposed to market risk related to change in foreign currency exchange rates. We contract with certain vendors that are located in Europe which have contracts denominated in foreign currencies. We are subject to fluctuations in foreign currency rates in connection with these agreements. We do not currently hedge our foreign exchange rate risk. As of March 31, 2014 and December 31, 2013, we had minimal liabilities denominated in foreign currencies.

Item 4. Controls and Procedures

Management s Evaluation of our Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities and Exchange Act of 1934 is (1) recorded, processed, summarized, and reported within the time periods specified in the SEC s rules and forms and (2) accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2014 (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934). Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our principal executive officer and principal financial officer have concluded based upon the evaluation described above that, as of March 31, 2014, our disclosure controls and procedures were not effective at the reasonable assurance level due to the material weakness described below.

A material weakness is defined under SEC rules as a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of a company s annual or interim financial statements will not be prevented or detected on a timely basis by the company s internal controls. As a result of management s review of the evaluation and results, and other internal reviews and evaluations that were completed after the end of quarter, management concluded that we had a material weakness in our control environment and financial reporting process regarding our disclosure controls and procedures related to accounting for a milestone-based stock option award. Specifically, non-cash stock compensation expense relating to a milestone-based option granted to our Chief Executive Officer on July 25, 2013 was incorrectly calculated at mark-to-market on the vesting date rather than the grant date fair value.

This error was corrected prior to the filing of this Form 10-Q and has no impact on the financial results disclosed in prior periods. We do not believe the material weakness described above caused any meaningful or significant misreporting of our financial condition and results of operations for the quarter ended March 31, 2014.

Management s Remediation Initiatives

Management is pursuing the implementation of corrective measures to address the material weakness described above. In an effort to remediate the identified material weakness and enhance our internal controls, we have initiated, or plan to initiate, the following series of measures:

- Improve the technical capabilities of the accounting group through training and the retention of expert consultants to assist in the analysis and recording of complex accounting transactions;

- Replace the accounting software used to calculate stock compensation expense and ensure robust testing of stock compensation expense calculations in the new system;

- Improve segregation of duties related to data entry and review of information in stock compensation systems; and

- Improve the process for the review and monitoring of complex accounting matters.

We believe the measures described above will remediate the material weakness we have identified and strengthen our internal control over financial reporting. We are committed to continuing to improve our internal control processes and will continue to diligently and vigorously review our financial reporting controls and procedures. As we continue to evaluate and work to improve our internal control over financial reporting, we may determine to take additional measures to address control deficiencies or determine to modify, or in appropriate circumstances not to complete, certain of the remediation measures described above.

Changes in Internal Control Over Financial Reporting

During the three months ended March 31, 2014, there have been no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Securities Exchange Act of 1934, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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PART II. OTHER INFORMATION

Item 1. Legal Proceedings

In the ordinary course of business, we are from time to time involved in lawsuits, claims, investigations, proceedings, and threats of litigation relating to intellectual property, commercial arrangements and other matters. While the outcome of these proceedings and claims cannot be predicted with certainty, as of March 31, 2014, we were not party to any legal or arbitration proceedings that may have, or have had in the recent past, significant effects on our financial position or profitability. No governmental proceedings are pending or, to our knowledge, contemplated against us. We are not a party to any material proceedings in which any director, member of senior management or affiliate of ours is either a party adverse to us or our subsidiaries or has a material interest adverse to us or our subsidiaries.

Item 1A. Risk Factors

Other than described below, there have been no material changes from the risk factors set forth in the Company s Annual Report on Form 10-K, as filed with the SEC on March 21, 2014.

We have had a material weakness in internal control over financial reporting in the past and cannot assure you that additional material weaknesses will not be identified in the future. Our failure to implement and maintain effective internal control over financial reporting could result in material misstatements in our financial statements which could require us to restate financial statements, cause investors to lose confidence in our reported financial information and have a negative effect on our stock price.

During the quarter ended March 31, 2014, management and our independent registered public accounting firm have identified a material weakness in our internal control over financial reporting (as defined in the Public Company Accounting Oversight Board s Auditing Standard No. 5) related to the accounting for non-cash stock compensation expense for a milestone based stock option award. See Part I. Financial Information Item 4. Controls and Procedures of this Quarterly Report on Form 10-Q for more details on the material weakness.

We cannot assure you that additional material weaknesses or significant deficiencies in our internal control over financial reporting will not be identified in the future. Any failure to maintain or implement required new or improved controls, or any difficulties we encounter in their implementation, could result in additional significant deficiencies or material weaknesses, cause us to fail to meet our periodic reporting obligations or result in material misstatements in our financial statements. Any such failure could also adversely affect the results of periodic management evaluations regarding the effectiveness of our internal control over financial reporting. The existence of a material weakness could result in errors in our financial statements that could result in a restatement of financial statements, cause us to fail to meet our reporting obligations and cause investors to lose confidence in our reported financial information, leading to a decline in our stock price.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Use of Proceeds from Registered Equity Securities

In February 2014, we completed our IPO of 5.5 million shares of our Common Stock at a price of $12.00 per share for an aggregate offering price of $66.0 million. The offer and sale of all of the shares in the offering were registered under the Securities Act of 1933, as amended, (the Securities Act) pursuant to a registration statement on Form S-1 (File No. 333-193043), which was declared effective by the SEC on February 4, 2014 and filed pursuant to Rule 462(b) of the Securities Act. Citigroup Global Markets, Inc. and Cowen and Company, LLC acted as joint book-running managers of the offering and as representatives of the underwriters. Stifel, Nicolaus & Company, Incorporated and Needham & Company, LLC acted as co-managers for the offering. The offering commenced on February 4, 2014 and did not terminate until the sale of all of the shares offered.

We received net proceeds from the offering of approximately $61.4 million, after deducting approximately $4.6 million in underwriting discounts and commissions, excluding approximately $2.4 million of offering costs payable by us. None of the underwriting discounts and commissions or other offering expenses were incurred or paid to directors or officers of ours or their associates or to persons owning 10% or more of our common stock or to any affiliates of ours.

We have not used any of the net proceeds from the offering to make payments, directly or indirectly, to any director or officer of ours, or any of their associates, to any person owning 10 percent or more of our Common Stock or to any affiliate of ours. We have invested the balance of the net proceeds from the offering in a variety of capital preservation investments, including short-term, investment grade, interest bearing instruments and U.S. government securities. There has been no material change in our planned use of the balance of the net proceeds from the offering as described in our final prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) under the Securities Act.

Stock options and other equity awards

During the three months ended March 31, 2014, we granted options to purchase a total of 479,277 shares of our common stock to employees, at a weighted average price of $12.09 per share. During the same period, we issued 11,693 shares of common stock upon the exercise of options to purchase such shares of common stock at a weighted average price of $2.22 per share.

Option grants and the issuance of common stock upon exercise of such options were exempt pursuant to Rule 701 and Section 4(a)(2) of the Securities Act.

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Item 6. Exhibits

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth on the Exhibits Index, which Exhibit Index is incorporated herein by reference.

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Exhibit Number	Exhibit
10.1+	Bioprocessing Services Agreement between Genocea Biosciences, Inc. and FUJIFILM Diosynth Biotechnologies U.S.A., Inc. dated February 26, 2014
31.1	Certification pursuant to Section 302 of Sarbanes Oxley Act of 2002 by Chief Executive Officer
31.2	Certification pursuant to Section 302 of Sarbanes Oxley Act of 2002 by Chief Financial Officer
32.1	Certification of periodic financial report pursuant to Section 906 of Sarbanes Oxley Act of 2002 by Chief Executive Officer
32.2	Certification of periodic financial report pursuant to Section 906 of Sarbanes Oxley Act of 2002 by Chief Financial Officer
101*	The following materials from the Company s Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Balance Sheets as of March 31, 2014 and December 31, 2013, (ii) Condensed Statements of Operations and Comprehensive Loss for the three months ended March 31, 2014 and 2013 and for the period from August 16, 2006 (inception) to March 31, 2014, (iii) Condensed Statements of Cash Flows for the three months ended March 31, 2014 and 2013 and for the period from August 16, 2006 (inception) to March 31, 2014 and (iv) Notes to Unaudited Condensed Financial Statements

* As provided in Rule 406T of Regulation S-T, this information is furnished and not filed for purposes of Sections 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934.

+ Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment and this exhibit has been submitted separately to the SEC.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Genocea Biosciences, Inc.

Date: May 9, 2014	By:	/s/ WILLIAM D. CLARK William D. Clark *President and Chief Executive Officer and Director (Principal Executive Officer)*
Date: May 9, 2014	By:	/s/ JONATHAN POOLE Jonathan Poole *Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)*