INOVIO PHARMACEUTICALS, INC.
Form 10-Q
November 12, 2013
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

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

FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2013

OR

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

FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NO. 001-14888

INOVIO PHARMACEUTICALS, INC.
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE	33-0969592
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1787 SENTRY PARKWAY WEST BUILDING 18, SUITE 400 BLUE BELL, PENNSYLVANIA	19422
(Address of principal executive offices)	(Zip Code)

REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE: (267) 440-4200

SECURITIES REGISTERED PURSUANT TO SECTION 12(B) OF THE ACT:

COMMON STOCK, $0.001 PAR VALUE	NYSE MKT
(Title of Class)	(Name of Each Exchange on Which Registered)

SECURITIES REGISTERED PURSUANT TO SECTION 12(G) OF THE ACT: NONE

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

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

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

The number of shares outstanding of the Registrant's Common Stock, $0.001 par value, was 208,376,469, as of November 4, 2013.

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INOVIO PHARMACEUTICALS, INC.
FORM 10-Q

For the Quarterly Period Ended September 30, 2013

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Part I. Financial Information

Item 1. Financial Statements

INOVIO PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2013 (Unaudited)	December 31, 2012
ASSETS		
Current assets:		
Cash and cash equivalents	$33,067,421	$5,646,021
Short-term investments	13,104,863	8,034,001
Accounts receivable	10,574,199	830,433
Accounts receivable from affiliated entity	—	36,234
Prepaid expenses and other current assets	471,867	471,328
Prepaid expenses and other current assets from affiliated entity	573,017	887,167
Deferred tax asset	62,728	62,728
Total current assets	57,854,095	15,967,912
Restricted cash	100,674	100,410
Fixed assets, net	2,290,566	363,021
Investment in affiliated entity	11,084,123	10,703,332
Intangible assets, net	6,156,635	7,489,315
Goodwill	10,113,371	10,113,371
Common stock warrants	244,900	267,200
Other assets	171,000	134,193
Total assets	$88,015,364	$45,138,754
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$4,020,494	$3,181,574
Accounts payable and accrued expenses due to affiliated entity	494,460	187,275
Accrued clinical trial expenses	1,359,071	1,405,896
Common stock warrants	14,095,818	2,859,899
Deferred revenue	66,998	353,391
Deferred revenue from affiliated entity	401,041	388,542
Total current liabilities	20,437,882	8,376,577
Deferred revenue, net of current portion	1,724,547	88,609
Deferred revenue from affiliated entity, net of current portion	1,305,444	1,586,694
Deferred rent	2,166,849	65,076
Deferred tax liabilities	164,393	164,393
Total liabilities	25,799,115	10,281,349
Inovio Pharmaceuticals, Inc. stockholders' equity:		
Common stock	207,620	144,313
Additional paid-in capital	341,979,766	263,897,116
Accumulated deficit	(280,334,247)	(229,760,129)
Accumulated other comprehensive (loss) income	(98,022)	73,362
Total Inovio Pharmaceuticals, Inc. stockholders' equity	61,755,117	34,354,662
Non-controlling interest	461,132	502,743
Total stockholders' equity	62,216,249	34,857,405
Total liabilities and stockholders' equity	$88,015,364	$45,138,754

See accompanying notes.

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INOVIO PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Revenues:				
License fee and milestone revenue	$8,388,760	$22,495	$8,417,330	$68,240
License fee and milestone revenue from affiliated entity	106,250	106,250	318,750	318,750
Revenue under collaborative research and development arrangements with affiliated entity	—	116,234	—	116,234
Grants and miscellaneous revenue	991,835	609,717	2,991,600	2,480,675
Total revenues	9,486,845	854,696	11,727,680	2,983,899
Operating expenses:				
Research and development	5,438,405	4,972,319	14,964,599	13,541,984
General and administrative	3,282,796	2,674,362	9,303,535	7,859,359
Gain on sale of assets	—	(500,000)	(1,000,000)	(1,151,000)
Total operating expenses	8,721,201	7,146,681	23,268,134	20,250,343
Income (Loss) from operations	765,644	(6,291,985)	(11,540,454)	(17,266,444)
Other income (expense):				
Interest and other income, net	46,787	37,013	123,638	109,593
Change in fair value of common stock warrants	(34,952,210)	(1,113,638)	(39,579,704)	(1,067,029)
Gain (Loss) on investment in affiliated entity	3,248,926	736,121	380,791	(817,796)
Net loss	(30,890,853)	(6,632,489)	(50,615,729)	(19,041,676)
Net loss attributable to non-controlling interest	13,443	10,413	41,611	31,472
Net loss attributable to Inovio Pharmaceuticals, Inc.	$(30,877,410)	$(6,622,076)	$(50,574,118)	$(19,010,204)
Loss per common share—basic and diluted:				
Net loss per share attributable to Inovio Pharmaceuticals, Inc. stockholders	$(0.16)	$(0.05)	$(0.29)	$(0.14)
Weighted average number of common shares outstanding—basic and diluted	191,956,155	135,389,308	176,183,075	135,108,699

See accompanying notes.

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INOVIO PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Net loss	$(30,890,853)	$(6,632,489)	$(50,615,729)	$(19,041,676)
Other comprehensive income (loss):				
Foreign currency translation adjustments	1,331	684	(344)	697
Unrealized (loss) gain on short-term investments	(2,917)	27,904	(171,040)	57,012
Comprehensive loss	(30,892,439)	(6,603,901)	(50,787,113)	(18,983,967)
Comprehensive loss attributable to non-controlling interest	13,443	10,413	41,611	31,472
Comprehensive loss attributable to Inovio Pharmaceuticals, Inc.	$(30,878,996)	$(6,593,488)	$(50,745,502)	$(18,952,495)

See accompanying notes.

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INOVIO PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended September 30,	
	2013	2012
Cash flows from operating activities:		
Net loss	$(50,615,729)	$(19,041,676)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	124,552	124,123
Amortization of intangible assets	1,332,680	1,370,744
Change in value of common stock warrants	39,579,704	1,067,029
Stock-based compensation	1,338,427	1,176,874
Interest income accrued on short-term investments	(507)	(1,148)
Deferred rent	300,273	(10,852)
(Gain) Loss on investment in affiliated entity	(380,791)	817,796
Transaction costs associated with issuance of warrants	315,970	—
Gain on sale of intangible assets	(1,000,000)	(1,151,000)
Changes in operating assets and liabilities:		
Accounts receivable	(9,743,766)	(13,538)
Accounts receivable from affiliated entity	36,234	(95,914)
Prepaid expenses and other current assets	(64,139)	258,328
Prepaid expenses and other current assets from affiliated entity	314,150	(245,440)
Restricted cash	(264)	(264)
Other assets	26,793	(14,794)
Accounts payable and accrued expenses	792,095	(860,232)
Accounts payable and accrued expenses due to affiliated entity	307,185	89,757
Deferred revenue	1,349,545	14,465
Deferred revenue from affiliated entity	(268,751)	(268,750)
Net cash used in operating activities	(16,256,339)	(16,784,492)
Cash flows from investing activities:		
Purchases of investments	(5,691,902)	(7,642,157)
Maturities of investments	450,507	10,008,771
Purchases of capital assets	(250,597)	(219,865)
Proceeds from sale of intangible assets	1,000,000	650,000
Net cash (used in) provided by investing activities	(4,491,992)	2,796,749
Cash flows from financing activities:		
Proceeds from issuance of common stock and warrants, net of issuance costs	29,077,495	1,225,588
Proceeds from stock option and warrant exercises	19,092,580	—
Net cash provided by financing activities	48,170,075	1,225,588
Effect of exchange rate changes on cash and cash equivalents	(344)	697
Increase (Decrease) in cash and cash equivalents	27,421,400	(12,761,458)
Cash and cash equivalents, beginning of period	5,646,021	17,350,116
Cash and cash equivalents, end of period	$33,067,421	$4,588,658

See accompanying notes.

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INOVIO PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Description of Business

Inovio Pharmaceuticals, Inc. (the "Company" or "Inovio") is engaged in the discovery and development of a new generation of vaccines and immune therapies, called synthetic vaccines, focused on cancers and infectious diseases. The Company's DNA-based SynCon® technology is designed to provide universal protection against known as well as new unmatched strains of pathogens such as influenza and also generate strong T-cell responses to fight cancers and infectious diseases. The Company's preclinical development and clinical programs include cervical dysplasia/cancer (therapeutic), influenza (preventive), prostate cancer (therapeutic), leukemia (therapeutic), hepatitis C virus, hepatitis B virus, HIV, and malaria vaccines. The Company's partners and collaborators include Roche, University of Pennsylvania, Drexel University, National Microbiology Laboratory of the Public Health Agency of Canada, Program for Appropriate Technology in Health/Malaria Vaccine Initiative ("PATH" or "MVI"), National Institute of Allergy and Infectious Diseases ("NIAID"), Merck, University of Southampton, United States Military HIV Research Program ("USMHRP"), U.S. Army Medical Research Institute of Infectious Diseases ("USAMRIID"), HIV Vaccines Trial Network ("HVTN") and Department of Homeland Security ("DHS").

2. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of Inovio have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") for interim financial information and with instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. The condensed consolidated balance sheet as of September 30, 2013, condensed consolidated statements of operations for the three and nine months ended September 30, 2013 and 2012, condensed consolidated statements of comprehensive loss for the three and nine months ended September 30, 2013 and 2012 and the condensed consolidated statements of cash flows for the nine months ended September 30, 2013 and 2012, are unaudited, but include all adjustments (consisting of normal recurring adjustments) that the Company considers necessary for a fair presentation of the financial position, results of operations and cash flows for the periods presented. The results of operations for the three and nine months ended September 30, 2013 shown herein are not necessarily indicative of the results that may be expected for the year ending December 31, 2013, or for any other period. These financial statements, and notes thereto, should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2012, included in the Company's Form 10-K filed with the U.S. Securities and Exchange Commission ("SEC") on March 18, 2013. The balance sheet at December 31, 2012 has been derived from the audited financial statements at that date, but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements. The Company has evaluated subsequent events after the balance sheet date of September 30, 2013 through the date it filed these unaudited condensed consolidated financial statements with the SEC.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The Company incurred a net loss of $30.9 million and $50.6 million, respectively, for the three and nine months ended September 30, 2013. The Company had working capital of $37.4 million and an accumulated deficit of $280.3 million as of September 30, 2013. The Company's ability to continue its operations is dependent upon its ability to obtain additional capital in the future and achieve profitable operations. The Company expects to continue to rely on outside sources of financing to meet its capital needs and the Company may never achieve positive cash flow. These unaudited interim condensed consolidated financial statements do not include any adjustments to the specific amounts and classifications of assets and liabilities, which might be necessary should the Company be unable to continue in business. The Company's unaudited interim condensed consolidated financial statements as of and for the period ended September 30, 2013 have been prepared on a going concern basis, which contemplates the realization of assets

and the settlement of liabilities and commitments in the normal course of business for the foreseeable future.

3. Impact of Recently Issued Accounting Standards

The recent pronouncements below may have a significant effect on the Company's financial statements. Recent pronouncements that are not anticipated to have an impact on or are unrelated to the Company's financial condition, results of operations, or related disclosures are not discussed.

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Accounting Standards Update (“ASU”), No. 2013-02-In February 2013, the Financial Accounting Standards Board (“FASB”) issued an ASU which amended the disclosure requirements regarding the reporting of amounts reclassified out of accumulated other comprehensive income. The amendment does not change the current requirement for reporting net income or other comprehensive income, but requires additional disclosures about significant amounts reclassified out of accumulated other comprehensive income including the effect of the reclassification on the related net income line items. The Company has adopted ASU 2013-02 prospectively effective January 1, 2013 and the adoption is not expected to have a significant impact on its financial statements as the requirements are disclosure only in nature.

4. Principles of Consolidation

These unaudited condensed consolidated financial statements include the accounts of Inovio Pharmaceuticals, Inc. and its subsidiaries. In conjunction with the acquisition in June 2009 of VGX Pharmaceuticals (the “Merger”), the Company acquired an 88% interest in VGX Animal Health and certain shares in VGX International, Inc. (“VGX Int'l”) (a publicly-traded company in South Korea). The Company consolidates Genetronics, Inc., VGX Pharmaceuticals and its subsidiary VGX Animal Health and records a non-controlling interest for the 9% of VGX Animal Health it does not own as of September 30, 2013 and December 31, 2012. The Company's investment in VGX Int'l, which is recorded as investment in affiliated entity within the condensed consolidated balance sheets is accounted for at fair value on a recurring basis, with changes in fair value recorded on the condensed consolidated statements of operations within gain (loss) on investment in affiliated entity. All intercompany accounts and transactions have been eliminated upon consolidation.

Variable Interest Entities

In June 2009, the FASB issued authoritative guidance that requires companies to perform a qualitative analysis to determine whether a variable interest in another entity represents a controlling financial interest in a variable interest entity. A controlling financial interest in a variable interest entity is characterized by having both the power to direct the most significant activities of the entity and the obligation to absorb losses or the right to receive benefits of the entity. This guidance also requires on-going reassessments of variable interests based on changes in facts and circumstances. This guidance became effective for fiscal years beginning after November 15, 2009. The Company adopted the provisions of the guidance in the first quarter of 2010 and determined that none of the entities with which the Company currently conducts business and collaborations are variable interest entities, except VGXI (a wholly-owned subsidiary of VGX Int'l). The Company determined that they are not the primary beneficiary and therefore are not required to consolidate VGXI. The Company continues to assess its variable interests and has determined that no significant changes have occurred as of September 30, 2013.

5. Investments

Investments consist of mutual funds at September 30, 2013 and of certificates of deposit, mutual funds, and municipal bonds at December 31, 2012. The Company classifies all investments as available-for-sale, as the sale of such investments may be required prior to maturity to implement management strategies. These investments are carried at fair value, with the unrealized gains and losses reported as a component of accumulated other comprehensive income (loss) until realized. A decline in the market value of any investment below cost that is determined to be other-than-temporary will result in a revaluation of its carrying amount to fair value. The impairment is charged to earnings and a new cost basis for the investment is established. No such impairment charges were recorded during the three and nine months ended September 30, 2013.

The following is a summary of investments as of September 30, 2013 and December 31, 2012:

		As of September 30, 2013			
	Contractual Maturity (in years)	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
Mutual funds	Less than 1	$13,191,964	$—	$(87,101)	$ 13,104,863
Total investments		$13,191,964	$—	$(87,101)	$ 13,104,863
		As of December 31, 2012			

	Contractual Maturity (in years)	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
Mutual funds	Less than 1	$7,500,063	$ 83,868	$ —	$ 7,583,931
Certificates of deposit	Less than 1	250,000	—	—	250,000
Municipal bonds	Less than 1	201,470	—	(1,400)	200,070
Total investments		$7,951,533	$ 83,868	$ (1,400)	$ 8,034,001

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6. Marketable Securities and Fair Value Measurements

The guidance regarding fair value measurements establishes a three-tier fair value hierarchy which prioritizes the inputs used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted prices in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

The following table presents the Company's assets and liabilities that are measured at fair value on a recurring basis as of September 30, 2013:

	Fair Value Measurements at September 30, 2013			
	Total	Using Quoted Prices in Active Markets for Identical Assets (Level 1)	Using Significant Other Unobservable Inputs (Level 2)	Using Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds	$18,338,897	$18,338,897	$—	$—
Mutual funds	13,104,863	—	13,104,863	—
Investment in affiliated entity	11,084,123	11,084,123	—	—
Common stock warrants	244,900	—	—	244,900
Total Assets	$42,772,783	$29,423,020	$13,104,863	$244,900
Liabilities:				
Common stock warrants	$14,095,818	$—	$—	$14,095,818
Total Liabilities	$14,095,818	$—	$—	$14,095,818

The following table presents the Company's assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2012:

	Fair Value Measurements at December 31, 2012			
	Total	Using Quoted Prices in Active Markets for Identical Assets (Level 1)	Using Significant Other Unobservable Inputs (Level 2)	Using Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds	$1,686,406	$1,686,406	$—	$—
Mutual funds	7,583,931	—	7,583,931	—
Certificates of deposit	250,000	—	250,000	—
Municipal bonds	200,070	—	200,070	—
Investment in affiliated entity	10,703,332	10,703,332	—	—
Common stock warrants	267,200	—	—	267,200

Total Assets	$20,690,939	$12,389,738	$8,034,001	$267,200
Liabilities:				
Common stock warrants	$2,859,899	$—	$—	$2,859,899
Total Liabilities	$2,859,899	$—	$—	$2,859,899

Level 1 assets include money market funds held by the Company that are valued at quoted market prices, as well as the Company's investment in VGX Int'l, for which the fair value is based on the market value of 8,220,775 common shares on September 30, 2013 and December 31, 2012, listed on the Korean Stock Exchange. The Company accounts for its investment at fair value on a recurring basis.

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Level 2 assets at September 30, 2013 include mutual funds held by the Company that are initially valued at the transaction price and subsequently valued, at the end of each reporting period, typically utilizing market observable data. We obtain the fair value of our Level 2 assets from a professional pricing service, which may use quoted market prices for identical or comparable instruments, or inputs other than quoted prices that are observable either directly or indirectly. Our professional pricing service gathers quoted market prices and observable inputs for all of mutual funds from a variety of industry data providers. The valuation techniques used to measure the fair value of our Level 2 financial instruments were derived from non-binding market consensus prices that are corroborated by observable market data, quoted market prices for similar instruments, or pricing models such as discounted cash flow techniques. We validate the quoted market prices provided by our primary pricing service by comparing their assessment of the fair values of our investment portfolio balance against the fair values of our investment portfolio balance obtained from an independent source, which may include our investment managers.

Level 3 assets at September 30, 2013 include two warrants received by the Company to purchase shares of common stock of OncoSec Medical Incorporated (“OncoSec”), in connection with the first and second amendments to the Asset Purchase Agreement between the Company and OncoSec signed in September 2011 and March 2012, respectively. The first warrant to purchase 1,000,000 shares of common stock of OncoSec has a contractual life of five years with an exercise price of $1.20 per share. The second warrant to purchase 3,000,000 shares of common stock of OncoSec has a contractual life of five years with an exercise price of $1.00 per share.

As of September 30, 2013 the Company recorded a long-term asset of approximately $245,000 associated with the warrants received to purchase common stock of OncoSec. The Company valued the warrants received in March 2012 as of the issuance date using the Black Scholes pricing model and recorded a $501,000 gain on sale of assets within the condensed consolidated statement of operations. Inputs used in the pricing model include estimates of OncoSec stock price volatility, expected warrant life and risk-free interest rate. The Company develops its estimates based on publicly available historical data and knowledge of OncoSec. The Company reassesses the fair value of the warrants at each reporting date. The assumptions used to estimate the fair values of the OncoSec common stock warrants at September 30, 2013 are presented below:

Risk-free interest rate	0.63%
Expected volatility	85%
Expected life in years	3-3.5
Dividend yield	—

As a result of these calculations, the Company recorded a decrease in fair value of the two warrants of $21,000 and $22,000 for the three and nine months ended September 30, 2013, respectively, and an increase (decrease) in fair value of the two warrants of $11,000 and $(80,000) for the three and nine months ended September 30, 2012, respectively. The change in fair value is reflected in the Company's condensed consolidated statement of operations as a component of change in fair value of common stock warrants.

The following table presents a summary of changes in fair value of the Company’s total Level 3 financial assets for the nine months ended September 30, 2013:

Balance at January 1, 2013	$267,200
Decrease in fair value included in change in fair value of common stock warrants	(22,300)
Balance at September 30, 2013	$244,900

Level 3 liabilities held as of September 30, 2013 consist of common stock warrant liabilities associated with warrants to purchase the Company's common stock issued in July 2009, January 2011 and March 2013. Level 3 liabilities held as of December 31, 2012 consist of common stock warrant liabilities associated with warrants to purchase the Company's common stock issued in July 2009, January 2011, December 2011 and March 2013. During the three and nine months ended September 30, 2013, warrants to purchase 20,584,997 shares of common stock were exercised.

As of September 30, 2013 the Company recorded a $14.1 million common stock warrant liability. The Company reassesses the fair value and the related inputs to determine the fair value of the common stock warrants at each reporting date utilizing a Black-Scholes pricing model. Inputs used in the pricing models include estimates of stock price volatility, expected warrant life and risk-free interest rate. The Company develops its estimates based on historical data. The range of assumptions used to estimate the fair values of common stock warrants at September 30, 2013 are presented below:

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Risk-free interest rate	0.13%-1.52%
Expected volatility	88%-119%
Expected life in years	0.75-4.96
Dividend yield	—

Changes in these assumptions as well as in the Company's stock price on the valuation date can have a significant impact on the fair value of the common stock warrant liability. As a result of these calculations, the Company recorded an increase in fair value of $34.9 million and $39.6 million for the three and nine months ended September 30, 2013, respectively, and an increase in fair value of $1.1 million and $987,000 for the three and nine months ended September 30, 2012, respectively. The significant change in fair value was primarily due to the increase in the Company's stock price during the period. The change in fair value is reflected in the Company's condensed consolidated statement of operations as a component of change in fair value of common stock warrants. Warrants that were exercised during the period were revalued on the day prior to exercise and then reclassified into stockholders' equity upon exercise.

The following table presents the changes in fair value of the Company’s total Level 3 financial liabilities for the nine months ended September 30, 2013:

Balance at January 1, 2013	$2,859,899
Record fair value of warrants issued in March 2013 financing	5,968,244
Increase in fair value included in change in fair value of common stock warrants	39,557,404
Change in classification from liability to stockholders' equity due to warrant exercises	(34,289,729)
Balance at September 30, 2013	$14,095,818

7. Goodwill and Intangible Assets

The following sets forth the goodwill and intangible assets by major asset class:

		September 30, 2013			December 31, 2012		
	Useful Life (Yrs)	Gross	Accumulated Amortization	Net Book Value	Gross	Accumulated Amortization	Net Book Value
Non-Amortizing:							
Goodwill(a)		$10,113,371	$—	$10,113,371	$10,113,371	$—	$10,113,371
Amortizing:							
Patents	8 – 17	5,802,528	(5,064,115)	738,413	5,802,528	(4,852,673)	949,855
Licenses	8 – 17	1,323,761	(1,068,431)	255,330	1,323,761	(1,046,870)	276,891
CELLECTRA®(b)	5 – 11	8,106,270	(5,241,398)	2,864,872	8,106,270	(4,334,234)	3,772,036
GHRH(b)	11	335,314	(137,294)	198,020	335,314	(113,531)	221,783
Other(c)	18	4,050,000	(1,950,000)	2,100,000	4,050,000	(1,781,250)	2,268,750
Total intangible assets		19,617,873	(13,461,238)	6,156,635	19,617,873	(12,128,558)	7,489,315
Total goodwill and intangible assets		$29,731,244	$(13,461,238)	$16,270,006	$29,731,244	$(12,128,558)	$17,602,686

(a) Goodwill was recorded from the Inovio AS acquisition in January 2005 and from the acquisition of VGX in June 2009 for $3.9 million and $6.2 million, respectively.

(b) CELLECTRA® and GHRH are developed technologies which were recorded from the acquisition of VGX.

(c) Other intangible assets represent the fair value of acquired contracts and intellectual property from the Inovio AS acquisition.

Aggregate amortization expense on intangible assets for the three and nine months ended September 30, 2013 was $440,000 and $1.3 million, respectively. Aggregate amortization expense on intangible assets for the three and nine months

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ended September 30, 2012 was $453,000 and $1.4 million, respectively. Estimated aggregate amortization expense for each of the five succeeding fiscal years is $438,000 for the remainder of fiscal year 2013, $943,000 for 2014, $870,000 for 2015, $816,000 for 2016, $775,000 for 2017 and $773,000 for 2018.

8. Stockholders' Equity

The following is a summary of the Company's authorized and issued common and preferred stock as of September 30, 2013 and December 31, 2012:

	Authorized	Issued	Outstanding as of September 30, 2013	Outstanding as of December 31, 2012
Common Stock, par $0.001	600,000,000	207,620,037	207,620,037	144,313,005
Series A Preferred Stock, par $0.001	1,000	817	—	—
Series B Preferred Stock, par $0.001	1,000	750	—	—
Series C Preferred Stock, par $0.001	1,091	1,091	26	26
Series D Preferred Stock, par $0.001	1,966,292	1,966,292	—	—

Common Stock

In May 2013, the Company filed a Certificate of Amendment to the Certificate of Incorporation with the Delaware Secretary of State. The Certificate of Amendment increased the number of shares of common stock the Company has the authority to issue from 300,000,000 shares to 600,000,000 shares.

In March 2013, the Company completed an underwritten offering of 27,377,266 shares of common stock and warrants to purchase an aggregate of up to 13,688,633 shares of common stock. The shares and warrants were sold in units at a price of $0.55 per unit, with each unit consisting of one share of common stock and a warrant to purchase 0.50 share of common stock at an exercise price of $0.7936 per share. The warrants have a term of five and one-half years. The net proceeds, after deducting the underwriters' discounts and other offering expenses, were approximately $14.0 million. The Company valued the registered warrants issued in connection with the March 2013 financing as of the issuance date using the Black Scholes pricing model and recorded a current liability on the condensed consolidated balance sheet of $6.0 million. The warrants were subsequently revalued and the Company recorded the increase in fair value of $19.6 million and $22.7 million to change in fair value of common stock warrants on the condensed consolidated statement of operations for the three and nine months ended September 30, 2013, respectively. As of September 30, 2013, 10,290,908 of these warrants had been exercised. Transaction costs associated with the issuance of the warrants were allocated by using the relative fair value approach. These transaction costs of $316,000 were immediately expensed and included as part of general and administrative expense in the Company's condensed consolidated statement of operations for the nine months ended September 30, 2013.

In June 2012, the Company entered into an "at-the-market" (ATM) sales agreement (the "Sales Agreement") with an outside placement agent (the "Placement Agent") to sell shares of its common stock with aggregate gross proceeds of up to $25.0 million from time to time, through an ATM equity offering program under which the Placement Agent will act as sales agent. Under the Sales Agreement, the Company will set the parameters for the sale of shares, including the number of shares to be issued, the time period during which sales are requested to be made, limitation on the number of shares that may be sold in any one trading day and any minimum price below which sales may not be made. The Sales Agreement provides that the Placement Agent will be entitled to compensation for its services in an amount equal to 3.0% of the gross proceeds from the sales of shares sold through the Placement Agent under the Sales Agreement. The Company has no obligation to sell any shares under the Sales Agreement, and may at any time suspend solicitation and offers under the Sales Agreement.

During the nine months ended September 30, 2013, the Company sold a total of 14,011,526 shares of common stock under the ATM Sales Agreement. The sales were made at a weighted average price of $1.11 per share with net proceeds to the Company of $15.1 million.

During the year ended December 31, 2012, the Company sold a total of 9,344,611 shares of common stock under the ATM Sales Agreement. The sales were made at a weighted average price of $0.59 per share with net proceeds to the

Company of $5.3 million.

Warrants

The Company accounts for registered common stock warrants issued in July 2009, January 2011, December 2011 and March 2013 under the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially

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settled in, a company's own stock, on the understanding that in compliance with applicable securities laws, the registered warrants require the issuance of registered securities upon exercise and do not sufficiently preclude an implied right to net cash settlement. The Company classifies registered warrants on the condensed consolidated balance sheet as a current liability which is revalued at each balance sheet date subsequent to the initial issuance. Determining the appropriate fair-value model and calculating the fair value of registered warrants requires considerable judgment, including estimating stock price volatility and expected warrant life. The Company develops its estimates based on historical data. A small change in the estimates used may have a relatively large change in the estimated valuation. The Company uses the Black-Scholes pricing model to value the registered warrants. Changes in the fair market value of the warrants are reflected in the condensed consolidated statement of operations as "Change in fair value of common stock warrants."

The following table summarizes the warrants outstanding as of September 30, 2013 and December 31, 2012:

			As of September 30, 2013		As of December 31, 2012	
Issued in Connection With:	Exercise Price	Expiration Date	Number of Warrants	Common Stock Warrant Liability	Number of Warrants	Common Stock Warrant Liability
March 2013 financing	$0.79	September 12, 2018	3,397,725	$ 6,292,586	—	$ —
December 2011 financing	$0.65	December 6, 2016	—	—	5,774,784	2,078,921
January 2011 financing	$1.40	January 27, 2016	6,900,000	7,658,999	10,565,200	779,711
July 2009 financing	$3.38	July 1, 2014	333,333	144,233	333,333	1,267
Warrants assumed in June 2009 Merger	$1.02-$1.28	August 1, 2015 - April 28, 2016	4,008,202	—	4,920,527	—
Total			14,639,260	$ 14,095,818	21,593,844	$ 2,859,899

During the three months ended September 30, 2013, warrants to purchase 10,290,908 shares of the Company's common stock which were issued in connection with the March 2013 financing were exercised, with proceeds to the Company of $8.2 million.

During the three months ended September 30, 2013, warrants to purchase 5,774,784 shares of the Company's common stock which were issued in connection with the December 2011 financing were exercised, with proceeds to the Company of $3.8 million.

During the three months ended September 30, 2013, warrants to purchase 3,665,200 shares of the Company's common stock which were issued in connection with the January 2011 financing were exercised, with proceeds to the Company of $5.1 million.

During the nine months ended September 30, 2013, warrants expired to purchase 58,220 shares of the Company's common stock, which were assumed in the June 2009 Merger.

In August 2012, warrants expired to purchase 150,000 shares of the Company's common stock issued in connection with consulting services received in August 2007.

Stock Options

The Company has one active stock and cash-based incentive plan, the Amended and Restated 2007 Omnibus Incentive Plan (the "Incentive Plan"), pursuant to which the Company has granted stock options and restricted stock awards to executive officers, directors and employees. The Incentive Plan was adopted on March 31, 2007, approved by the stockholders on May 4, 2007, approved by the stockholders as amended on May 2, 2008, and approved by the stockholders as amended and restated on August 25, 2009 and May 14, 2010. On May 14, 2010 the stockholders approved to increase the aggregate number of shares available for grant under the Incentive Plan by 2,000,000 and to

provide that the aggregate number of shares available for grant under the Incentive Plan will be increased on January 1 of each year beginning in 2011 by a number of shares equal to the lesser of (1) 2,055,331 or (2) such lesser number of shares as may be determined by the Board. At September 30, 2013, the Incentive Plan reserves 11,915,993 shares of common stock for issuance as or upon exercise of incentive awards granted and to be granted at future dates. At September 30, 2013, the Company had 1,218,868 shares of common stock available for future grant under the Incentive Plan, and 240,000 shares of vested restricted stock and options to purchase 9,259,626 shares of common stock outstanding under the Incentive Plan. The awards granted and available for future grant under the Incentive Plan generally vest over three years and have a maximum contractual term of ten years. The Incentive Plan terminates by its terms on March 31, 2017.

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The Incentive Plan supersedes all of the Company's previous stock option plans, which include the Amended 2000 Stock Option Plan and the VGX Equity Compensation Plan, under which the Company had options to purchase 1,147,999 and 6,574,572 shares of common stock outstanding at September 30, 2013, respectively. The terms and conditions of the options outstanding under these plans remain unchanged.

9. Net loss per share

Basic net loss per share is computed by dividing the net loss for the year by the weighted average number of common shares outstanding during the year. Diluted loss per share is calculated in accordance with the treasury stock method and reflects the potential dilution that would occur if securities or other contracts to issue common stock were exercised or converted to common stock. Since the effect of the assumed exercise of common stock options and other convertible securities was anti-dilutive for all periods presented, basic and diluted loss per share are the same.

The following table summarizes potential common shares that were excluded from the diluted net loss per share calculation because of their anti-dilutive effect:

	As of September 30,	
Common Stock Equivalents	2013	2012
Options to purchase common stock	16,982,197	16,538,985
Warrants to purchase common stock	14,639,260	21,593,844
Convertible preferred stock	38,233	38,233
Total	31,659,690	38,171,062

10. Stock-Based Compensation

The Company estimates the fair value of stock options granted using the Black-Scholes option pricing model. The Black-Scholes option pricing model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility and expected option life. The Company amortizes the fair value of the awards expected to vest on a straight-line basis. All option grants are amortized over the requisite service period of the awards. Expected volatility is based on historical volatility. The expected life of options granted is based on historical expected life. The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant, commensurate with the expected life. The forfeiture rate is based on historical data, and the Company records stock-based compensation expense only for those awards that are expected to vest. The dividend yield is based on the fact that no dividends have been paid historically and none are currently expected to be paid.

The weighted average assumptions used in the Black-Scholes model for employees and directors are presented below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Risk-free interest rate	0.68%	0.33%	0.40%	0.36%
Expected volatility	76%	129%	111%	131%
Expected life in years	4	4	4	4
Dividend yield	—	—	—	—
Forfeiture rate	8%	8%	8%	8%

Total employee and director compensation cost for the Company's stock plan recognized in the condensed consolidated statement of operations for the three and nine months ended September 30, 2013 was $250,000 and $920,000, respectively, of which $105,000 and $439,000 were included in research and development expenses and $145,000 and $481,000 were included in general and administrative expenses, respectively.

Total employee and director compensation cost for the Company's stock plan recognized in the condensed consolidated statement of operations for the three and nine months ended September 30, 2012 was $253,000 and $1.0 million, respectively, of which $117,000 and $477,000 were included in research and development expenses and

$136,000 and $551,000 were included in general and administrative expenses, respectively.
At September 30, 2013, there was $1.2 million of total unrecognized compensation cost related to unvested stock options, which is expected to be recognized over a weighted-average period of 1.9 years.

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The weighted average grant date fair value per share was $1.31 and $0.43 for employee and director stock options granted during the three and nine months ended September 30, 2013, respectively, and $0.44 and $0.47 for employee and director stock options granted during the three and nine months ended September 30, 2012, respectively.
The fair value of options granted to non-employees at the measurement dates were estimated using the Black-Scholes pricing model. Total stock-based compensation for options granted to non-employees for the three and nine months ended September 30, 2013 was $295,000 and $418,000, respectively. Total stock-based compensation for options granted to non-employees for the three and nine months ended September 30, 2012 was $46,000 and $149,000, respectively.

11. Related Party Transactions
VGX International Inc.
The Company conducts transactions with its affiliated entity, VGX Int'l.
On October 7, 2011, the Company entered into a Collaborative Development and License Agreement (the "Agreement") with VGX Int'l. Under the Agreement, the Company and VGX Int'l will co-develop the Company's SynCon® therapeutic vaccines for hepatitis B and C infections (the "Products"). Under the terms of the Agreement, VGX Int'l will receive marketing rights for the Products in Asia, excluding Japan, and in return will fully fund IND-enabling and initial Phase I and II clinical studies with respect to the Products. The Company will receive from VGX Int'l payments based on the achievement of clinical milestones and royalties based on sales of the Products in the licensed territories, retaining all commercial rights to the Products in all other territories.
On March 24, 2010, the Company entered into a Collaboration and License Agreement (the "VGX Int'l Agreement") with VGX Int'l. Under the VGX Int'l Agreement, the Company granted VGX Int'l an exclusive license to Inovio's SynCon® universal influenza vaccine delivered with electroporation to be developed in certain countries in Asia (the "Product"). As consideration for the license granted to VGX Int'l, the Company received payment of $3.0 million, and will receive research support, annual license maintenance fees and royalties on net Product sales. The Company recorded the $3.0 million as deferred revenue from affiliated entity, and will recognize it as revenue over the eight year expected period of the Company's performance obligation. In addition, contingent upon achievement of clinical and regulatory milestones, the Company will receive development payments over the term of the VGX Int'l Agreement. The VGX Int'l Agreement also provides Inovio with exclusive rights to supply devices for clinical and commercial purposes (including single use components) to VGX Int'l for use in the Product. The term of the VGX Int'l Agreement commenced upon execution and will extend on a country by country basis until the last to expire of all Royalty Periods for the territory (as such term is defined in the VGX Int'l Agreement) for any Product in that country, unless the VGX Int'l Agreement is terminated earlier in accordance with its provisions as a result of breach, by mutual agreement, or by VGX Int'l's right to terminate without cause upon prior written notice.
For the three and nine months ended September 30, 2013, the Company recognized revenue from VGX Int'l of $106,000 and $319,000, respectively, which consisted of licensing and other fees. Operating expenses related to VGX Int'l for the three and nine months ended September 30, 2013 include $402,000 and $960,000 respectively, related to biologics manufacturing. At September 30, 2013 and December 31, 2012 we had an accounts receivable balance of $0 and $36,000, respectively, from VGX Int'l and its subsidiaries. For the three and nine months ended September 30, 2012, the Company recognized revenue from VGX Int'l of $222,000 and $435,000, respectively, which consisted of licensing fees. Operating expenses related to VGX Int'l for the three and nine months ended September 30, 2012 include $288,000 and $616,000, respectively, related to biologics manufacturing and engineering services.
Prior to signing the Roche Agreement, the Company reacquired the rights, title and interest to hepatitis B in Asia previously licensed to VGX Int'l. As a result, the Company has recorded a liability as of September 30, 2013 of approximately $300,000, related to sub-license fees payable to VGX Int'l based on our up-front payment received from Roche.
OncoSec Medical Incorporated
On March 24, 2011, the Company completed the sale of certain assets related to certain non-DNA vaccine technology and intellectual property relating to selective electrochemical tumor ablation ("SECTA") to OncoSec Medical Incorporated, or OncoSec, pursuant to an Asset Purchase Agreement dated March 14, 2011 by and between the

Company and OncoSec.
The Company's Chairman, Dr. Avtar Dhillon, is the non-executive Chairman of OncoSec.
The Company has received total payment of $2.0 million from OncoSec through September 30, 2013, including $1.0 million received during the quarter ended June 30, 2013, and will receive an additional $1.0 million in scheduled payments over a period of approximately three years from the closing date and a royalty on any potential commercial product sales

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related to the SECTA technology if and when a product is approved. No receivable has been recorded for the $1.0 million due from OncoSec as collection is uncertain.

On September 28, 2011, the Company signed an amended agreement with OncoSec extending the term of the second payment owed to the Company in exchange for a warrant to purchase 1,000,000 shares of common stock of OncoSec. The warrant received was a five-year warrant with an exercise price of $1.20 per share. (See Note 6 for further discussion.)
On March 24, 2012, the Company signed a second amended agreement with OncoSec further extending the term of the payments owed to the Company in exchange for a warrant to purchase 3,000,000 shares of common stock of OncoSec. The warrant received was a five-year warrant with an exercise price of $1.00 per share. (See Note 6 for further discussion.)

12. Commitments and Contingencies

In April 2013, the Company entered into an office lease (the “Lease”) with BMR-Wateridge LP, located in San Diego, California. The lease requires the lessor to complete and pay for certain improvements to the building before the commencement of the lease which is estimated to be in the fourth quarter of 2013. As of September 30, 2013 the lessor has completed approximately $1.8 million of these improvements. This amount has been recorded as a leasehold improvement within fixed assets on the condensed consolidated balance sheet, offset by a corresponding amount recorded in deferred rent. The initial term of the Lease is ten years. The Company intends to use the facility for office and research and development purposes.
The base rent adjusts periodically throughout the ten year term of the Lease, with monthly payments ranging from zero to $82,945. In addition, the Company will pay the landlord our share of operating expenses and a property management fee and has paid a security deposit of $64,000.

13. Roche Collaboration, Option and License Agreement

In September 2013, the Company entered into a Collaborative, License, and Option Agreement (the “Agreement”) with F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc. (“Roche”). Under the Agreement, the Company and Roche will co-develop highly-optimized, multi-antigen DNA immunotherapies targeting prostate cancer and hepatitis B (the “Products”).
Roche acquired an exclusive worldwide license for the Company's DNA-based vaccines INO-5150 (targeting prostate cancer) and INO-1800 (targeting hepatitis B) as well as the use of the Company's CELLECTRA® electroporation technology for delivery of the vaccines. Roche also obtained an option to license additional vaccines in connection with a collaborative research program in prostate cancer.
Under the terms of the Agreement, Roche made an upfront payment of $10 million and has agreed to make additional development, regulatory and commercial event based payments of up to $412.5 million. Additional event based payments could also be made to the Company if Roche pursues other indications with INO-5150 or INO-1800. Of these event based payments, we expect to achieve up to $5.0 million and $3.0 million related to INO-5150 and INO-1800, respectively, in the next two fiscal years. No event based payments or milestones were achieved during the periods presented.
The Company is entitled to receive up to double-digit tiered royalties on product sales. Unless terminated earlier in accordance with its terms, the Agreement continues in effect until the date when no royalty or other payment obligations under the Agreement are or will become due, i.e., a royalty term ending on the later of the date that is (a) ten years after the date of the first commercial sale of the product that is subject to the Agreement or (b) the expiration of the last to expire of our patent rights that are subject to the Agreement. Under the terms of the Agreement we also agreed to perform certain research and development and manufacturing and supply services, at Roche's expense.

The Company identified the deliverables at the inception of the agreement. The Company has determined that the license to INO-5150 and INO-1800, the Option Right to license additional vaccines, research and development services, manufacturing and drug supply, and participation in the Joint Steering Committee individually represent separate units of accounting because each deliverable has standalone value. The best estimated selling prices for these units of accounting were determined based on market conditions, the terms of comparable collaborative agreements for similar technology in the pharmaceutical and biotechnology industry, the Company's pricing practices and pricing objectives and the nature of the research and development services to be provided. While market data was considered throughout the valuation process, ultimately, the selling prices of the licenses were determined utilizing two forms of the relief from royalty method under the Income Approach and the cost-to-recreate method under the Cost Approach. The arrangement consideration was allocated to the deliverables based on the relative selling price method.

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The amount allocable to the delivered unit or units of accounting is limited to the amount that is not contingent upon the delivery of additional items or meeting other specified performance conditions. Based on the results of the Company's analysis, the $10 million up-front payment was allocated as follows: $5 million and $3.4 million to the license to INO-5150 and INO-1800, respectively, and $1.5 million to the Option Right. The amounts allocated to the licenses to INO-5150 and INO-1800 were recognized as license fee and milestone revenue during the three and nine months ended September 30, 2013, as these were determined to be earned upon the granting and delivery of the licenses. Due to the Company's continuing involvement obligations, the remaining amounts will be classified as deferred revenue as of September 30, 2013. The Company will recognize expenses related to research and development services and manufacturing and drug supply as revenues under collaborative agreements as the related services are performed.

14. Subsequent Events

Subsequent to September 30, 2013, Roche made the upfront payment of $10.0 million to the Company due from the Collaboration, Option and License Agreement.
Subsequent to September 30, 2013, the Company sold 348,995 shares of common stock under its ATM Sales Agreement for net proceeds of $782,000.
Subsequent to September 30, 2013, warrants to purchase 375,000 shares of common stock were exercised for total proceeds to the Company of $298,000.

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ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This report contains forward-looking statements, as defined in Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements relate to future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential" or "continue," the negative of such terms or other comparable terminology. These statements are only predictions. Actual events or results may differ materially. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Moreover, neither we, nor any other person, assume responsibility for the accuracy and completeness of the forward-looking statements. We are under no obligation to update any of the forward-looking statements after the filing of this Quarterly Report to conform such statements to actual results or to changes in our expectations.

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes and other financial information appearing elsewhere in this Quarterly Report. Readers are also urged to carefully review and consider the various disclosures made by us that attempt to advise interested parties of the factors that affect our business, including without limitation the disclosures made in Item 1A of Part II of this Quarterly Report under the Caption "Risk Factors" and under the captions "Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Risk Factors" and in our audited consolidated financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2012.

Risk factors that could cause actual results to differ from those contained in the forward-looking statements include but are not limited to: our history of losses; our lack of products that have received regulatory approval; uncertainties inherent in clinical trials and product development programs, including but not limited to the fact that pre-clinical and clinical results may not be indicative of results achievable in other trials or for other indications, that the studies or trials may not be successful or achieve desired results, that pre-clinical studies and clinical trials may not commence or be completed in the time periods anticipated, that results from one study may not necessarily be reflected or supported by the results of other similar studies, that results from an animal study may not be indicative of results achievable in human studies, that clinical testing is expensive and can take many years to complete, that the outcome of any clinical trial is uncertain and failure can occur at any time during the clinical trial process, and that our electroporation technology and DNA vaccines may fail to show the desired safety and efficacy traits in clinical trials; the availability of funding; the ability to manufacture vaccine candidates; the availability or potential availability of alternative therapies or treatments for the conditions targeted by us or our collaborators, including alternatives that may be more efficacious or cost-effective than any therapy or treatment that we and our collaborators hope to develop; whether our proprietary rights are enforceable or defensible or infringe or allegedly infringe on rights of others or can withstand claims of invalidity; and the impact of government healthcare proposals.

General

We are engaged in the discovery, development, and delivery of a new generation of vaccines and immune therapies, called synthetic vaccines, focused on cancers and infectious diseases. Our DNA-based immune therapies, in combination with our proprietary electroporation delivery, are generating best-in-class immune responses, with therapeutic T-cell responses exceeding other technologies in terms of magnitude, breadth, and response rate. The Company's DNA-based SynCon® technology is also designed to provide universal protection against known as well as new unmatched strains of pathogens such as influenza. Human data to date have shown a favorable safety profile. Our clinical programs include HPV/cervical cancer (therapeutic), avian influenza (preventive), prostate cancer (therapeutic), leukemia (therapeutic), HCV, HBV and HIV vaccines. We are advancing preclinical research for a universal seasonal/pandemic influenza vaccine as well as other products. Our partners and collaborators include Roche, University of Pennsylvania, Drexel University, National Microbiology Laboratory of the Public Health Agency of Canada, Program for Appropriate Technology in Health/Malaria Vaccine Initiative ("PATH" or "MVI"),

National Institute of Allergy and Infectious Diseases (“NIAID”), Merck, University of Southampton, United States Military HIV Research Program (“USMHRP”), U.S. Army Medical Research Institute of Infectious Diseases (“USAMRIID”), HIV Vaccines Trial Network (“HVTN”) and Department of Homeland Security (“DHS”).

All of our potential human products are in research and development phases. We have not generated any revenues from the sale of any such products, and we do not expect to generate any such revenues for at least the next several years. We earn revenue from license fees and milestone revenue, collaborative research and development agreements, grants and government contracts. Our product candidates will require significant additional research and development efforts, including extensive preclinical and clinical testing. All product candidates that we advance to clinical testing will require regulatory approval prior

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to commercial use, and will require significant costs for commercialization. We may not be successful in our research and development efforts, and we may never generate sufficient product revenue to be profitable.

Recent Developments

In September 2013, we entered into a Collaborative, License, and Option Agreement (the "Agreement") with F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc. ("Roche"). Under the Agreement, we and Roche will co-develop highly-optimized, multi-antigen DNA immunotherapies targeting prostate cancer and hepatitis B (the "Products"). Roche acquired an exclusive worldwide license for our DNA-based vaccines INO-5150 (targeting prostate cancer) and INO-1800 (targeting hepatitis B) as well as the use of our CELLECTRA® electroporation technology for delivery of the vaccines. Roche also obtained an option to license additional vaccines in connection with a collaborative research program in prostate cancer.

Under the terms of the Agreement, we will receive from Roche payments based on the achievement of clinical milestones and royalties based on sales of the Products. In October 2013, Roche made an upfront payment of $10.0 million to us, and will also provide preclinical R&D support and payments for near-term regulatory milestones as well as payments upon reaching certain development and commercial milestones potentially up to $412.5 million. Additional development milestone payments could also be made to us if Roche pursues other indications with INO-5150 or INO-1800. In addition, we are entitled to receive up to double-digit tiered royalties on product sales.

In April 2013 we entered into an office lease (the "Lease") with BMR-Wateridge LP, located in San Diego, California. We expect to occupy the space commencing in the fourth quarter of 2013. The initial term of the Lease is ten years. We intend to use the facility for office and research and development purposes. The base rent adjusts periodically throughout the ten year term of the Lease, with monthly payments ranging from zero to $82,945. In addition, we will pay the landlord our share of operating expenses and a property management fee and have paid a security deposit of $64,000.

In March 2013, our collaborator ChronTech Pharma AB reported data from its phase II study of its early-generation, single antigen hepatitis C virus (HCV) vaccine delivered using our MedPulser® delivery device in combination with a drug regimen. The study did not achieve results showing a statistically significant difference in efficacy compared to the drug regimen alone. We have ceased all activities relating to this collaboration. We have achieved T-cell responses with our proprietary, multi-antigen HCV DNA vaccine and CELLECTRA® delivery device that are far superior to immunogenicity data generated by ChronTech and which included the observation of functional T-cells in the liver. In October 2013, our affiliate VGX Int'l launched a phase I study of this HCV vaccine.

The University of Southampton has indicated that its UK phase II clinical study of its WT1 leukemia vaccine delivered using our electroporation technology is not currently recruiting new subjects due to an interruption in sponsor funding. Efforts are under way to re-establish funding, however, the study is on hold pending the outcome of these refunding efforts. There have been no safety concerns identified during the study. Our aim is to maximize shareholder value by advancing our wholly-owned, integrated proprietary SynCon® vaccine and electroporation technology platform. We have designed a SynCon® cancer vaccine candidate based on the WT1 antigen and have generated promising preclinical data. This new candidate will be a part of multiple cancer immunotherapeutic programs in our oncology pipeline.

The Company continues to focus on its most important commercial opportunities and proprietary programs funded by third parties. To build on promising preclinical and clinical data from our universal flu vaccine program, we are actively seeking additional grant funding and partnerships to further develop our potentially paradigm-changing flu products.

In March 2013, we completed an underwritten offering of 27,377,266 shares of our common stock and warrants to purchase an aggregate of up to 13,688,633 shares of common stock. The shares and warrants were sold in units at a price of $0.55 per unit, with each unit consisting of one share of common stock and a warrant to purchase 0.50 shares of common stock at an exercise price of $0.7936 per share. The warrants have a term of five and one-half years. The net proceeds, after deducting the underwriters' discounts and other offering expenses, were approximately $14.0 million.

As of September 30, 2013 we had an accumulated deficit of $280.3 million. We expect to continue to incur substantial operating losses in the future due to our commitment to our research and development programs, the funding of

preclinical studies, clinical trials and regulatory activities and the costs of general and administrative activities.

Critical Accounting Policies

The SEC defines critical accounting policies as those that are, in management's view, important to the portrayal of our financial condition and results of operations and require management's judgment. Our discussion and analysis of our financial condition and results of operations is based on our audited consolidated financial statements, which have been prepared in accordance with U.S. GAAP. There have been no changes to our critical accounting policies during the three and nine months ended September 30, 2013. The preparation of these financial statements requires us to make estimates and judgments that

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affect the reported amounts of assets, liabilities, revenue and expenses. We base our estimates on experience and on various assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from those estimates. Our critical accounting policies include:

Revenue Recognition.

Grant revenue

We receive non-refundable grants under available government programs. Government grants towards current expenditures are recorded as revenue when there is reasonable assurance that we have complied with all conditions necessary to receive the grants, collectability is reasonably assured, and as the expenditures are incurred.

License fee and milestone revenue

We have adopted a strategy of co-developing or licensing our gene delivery technology for specific genes or specific medical indications. Accordingly, we have entered into collaborative research and development agreements and have received funding for pre-clinical research and clinical trials. Prior to the adoption of the Financial Accounting Standards Board's ("FASB") Accounting Standards Update ("ASU") No. 2009-13, Revenue Recognition (Topic 605): Multiple-Deliverable Revenue Arrangements, we analyzed our multiple element arrangements to determine whether the identified deliverables could be accounted for individually as separate units of accounting. The delivered item(s) were considered a separate unit of accounting if all of the following criteria were met: (1) the delivered item(s) has value to the customer on a standalone basis; (2) there is objective and reliable evidence of the fair value of the undelivered item(s); and (3) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item(s) is considered probable and substantially in our control. If these criteria were not met, the deliverable was combined with other deliverables in the arrangement and accounted for as a combined unit of accounting.

For new collaborative agreements or material modifications of existing collaborative agreements entered into after December 31, 2010, we follow the provisions of ASU No. 2009-13. In order to account for the multiple-element arrangements, we identify the deliverables included within the agreement and evaluate which deliverables represent separable units of accounting. Analyzing the arrangement to identify deliverables requires the use of judgment, and each deliverable may be an obligation to deliver services, a right or license to use an asset, or another performance obligation. A delivered item is considered a separate unit of accounting when the delivered item has value to the collaborator on a standalone basis based on the consideration of the relevant facts and circumstances for each arrangement.

Arrangement consideration is allocated at the inception of the agreement to all identified units of accounting based on their relative selling price. The relative selling price for each deliverable is determined using vendor specific objective evidence ("VSOE"), of selling price or third-party evidence of selling price if VSOE does not exist. If neither VSOE nor third-party evidence of selling price exists, we use our best estimate of the selling price for the deliverable. The amount of allocable arrangement consideration is limited to amounts that are fixed or determinable. The consideration received is allocated among the separate units of accounting, and the applicable revenue recognition criteria are applied to each of the separate units. Changes in the allocation of the sales price between delivered and undelivered elements can impact revenue recognition but do not change the total revenue recognized under any agreement.

Upfront license fee payments are recognized upon delivery of the license if facts and circumstances dictate that the license has standalone value from the undelivered items, the relative selling price allocation of the license is equal to or exceeds the upfront license fee, persuasive evidence of an arrangement exists, our price to the collaborator is fixed or determinable, and collectability is reasonably assured. Upfront license fee payments are deferred if facts and circumstances dictate that the license does not have standalone value. The determination of the length of the period over which to defer revenue is subject to judgment and estimation and can have an impact on the amount of revenue recognized in a given period.

Prior to the adoption of ASU No. 2010-17, Revenue Recognition (Topic 605): Milestone Method of Revenue Recognition ("Milestone Method"), we recognized non-refundable milestone payments upon the achievement of specified milestones upon which we had earned the milestone payment, provided the milestone payment was

substantive in nature and the achievement of the milestone was not reasonably assured at the inception of the agreement. We deferred payments for milestone events that were reasonably assured and recognized them ratably over the minimum remaining period of our performance obligations. Payments for milestones that were not reasonably assured were treated as the culmination of a separate earnings process and were recognized as revenue when the milestones were achieved.

Effective January 1, 2011, we adopted on a prospective basis the Milestone Method of ASU No. 2010-17. Under the Milestone Method, we will recognize consideration that is contingent upon the achievement of a milestone in its entirety as

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revenue in the period in which the milestone is achieved only if the milestone is substantive in its entirety. A milestone is considered substantive when it meets all of the following criteria:

1. The consideration is commensurate with either the entity's performance to achieve the milestone or the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the entity's performance to achieve the milestone,
2. The consideration relates solely to past performance, and
3. The consideration is reasonable relative to all of the deliverables and payment terms within the arrangement.

A milestone is defined as an event (i) that can only be achieved based in whole or in part on either the entity's performance or on the occurrence of a specific outcome resulting from the entity's performance, (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved and (iii) that would result in additional payments being due to the Company.

Research and Development Expenses. Since our inception, most of our activities have consisted of research and development efforts related to developing our electroporation technologies and DNA vaccines. Research and development expenses consist of expenses incurred in performing research and development activities including salaries and benefits, facilities and other overhead expenses, clinical trials, contract services and other outside expenses. Research and development expenses are charged to operations as they are incurred.

Valuation and Impairment Evaluations of Goodwill and Intangible Assets. Goodwill represents the excess of acquisition cost over the fair value of the net assets of acquired businesses. As of September 30, 2013, our intangible assets resulting from the acquisition of VGX and Inovio AS, and additional intangibles including previously capitalized patent costs and license costs, net of accumulated amortization, totaled $6.2 million. Intangible assets are amortized over their estimated useful lives ranging from 5 to 18 years. We are concurrently conducting pre-clinical, Phase I, and Phase II trials using acquired intangibles, and we have entered into certain significant licensing agreements for use of these acquired intangibles.

Historically we have recorded patents at cost and amortized these costs using the straight-line method over the expected useful lives of the patents or 17 years, whichever is less. Patent costs consist of the consideration paid for patents and related legal costs. Effective June 1, 2009, in connection with our acquisition of VGX, all new patent costs are being expensed as incurred. Patent costs currently capitalized will continue to be amortized over the expected life of the patent. The effect of this change was immaterial to prior periods. We record license costs based on the fair value of consideration paid and amortize using the straight-line method over the shorter of the expected useful life of the underlying patents or the term of the related license agreement.

The determination of the value of such intangible assets requires management to make estimates and assumptions that affect our consolidated financial statements. We assess potential impairments to intangible assets when there is evidence that events or changes in circumstances indicate that the carrying amount of an asset may not be recovered. Our judgments regarding the existence of impairment indicators and future cash flows related to intangible assets are based on operational performance of our acquired businesses, market conditions and other factors. If impairment is indicated, we reduce the carrying value of the intangible asset to fair value. While our current and historical operating and cash flow losses are potential indicators of impairment, we believe the future cash flows to be received from our intangible assets will exceed the intangible assets' carrying value, and accordingly, we have not recognized any impairment losses through September 30, 2013.

Goodwill and intangible assets with indefinite lives are not amortized but instead are measured for impairment annually, or when events indicate that impairment exists. Our accounting policy with respect to reviewing goodwill for impairment is a two step process. The first step of the impairment test compares the fair value of our reporting unit with its carrying value including allocated goodwill. If the carrying value of our reporting unit exceeds its fair value, then the second step of the impairment test is performed to measure the impairment loss, if any. We test goodwill for impairment at the entity level, which is considered our reporting unit. Our estimate of fair value is determined using both the Discounted Cash Flow method of the Income Approach and the Guideline Public Company method of the Market Approach. The Discounted Cash Flow method estimates future cash flows of our business for a certain discrete period and then discounts them to their present value. The Guideline Public Company method computes value indicators (“multiples”) from the operating data of the selected publicly traded guideline companies. After these

multiples were evaluated, appropriate value indicators were selected and applied to the operating statistics of the reporting unit to arrive at indications of value. Specifically, we relied upon the application of Total Invested Capital based valuation multiples for each guideline company. In applying the Income and Market Approaches, premiums and discounts were determined and applied to estimate the fair values of the reporting unit. To arrive at the indicated value of equity under each approach, we then assigned a relative weighting to the resulting values from each approach to determine whether the carrying value of the reporting unit exceeds its fair value, thus requiring step two of the impairment test.

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We conduct the impairment test annually on November 30th for each fiscal year for which goodwill is evaluated for impairment. We are also aware of the requirement to evaluate goodwill for impairment at other times should circumstances arise. To date, we have concluded that the fair value of the reporting unit significantly exceeded the carrying value and therefore, step two of the impairment test has never been performed.

Although there are inherent uncertainties in this assessment process, the estimates and assumptions we use are consistent with our internal planning. If these estimates or their related assumptions change in the future, we may be required to record an impairment charge on all or a portion of our goodwill and intangible assets. Furthermore, we cannot predict the occurrence of future impairment-triggering events nor the impact such events might have on our reported asset values. Future events could cause us to conclude that impairment indicators exist and that goodwill or other intangible assets associated with our acquired businesses are impaired. Any resulting impairment loss could have an adverse impact on our results of operations.

Stock-based Compensation. We have equity incentive plans under which we have granted incentive stock options, restricted stock units and non-qualified stock options.

Our employee stock-based compensation cost is estimated at the grant date based on the fair-value of the award and is recognized as an expense ratably over the requisite service period of the award. Determining the appropriate fair-value model and calculating the fair value of stock-based awards at the grant date requires considerable judgment, including estimating stock price volatility, expected option life and forfeiture rates. We develop our estimates based on historical data. If factors change and we employ different assumptions in future periods, the compensation expense that we record may differ significantly from what we have recorded in the current period. A small change in the estimates used may have a relatively large change in the estimated valuation. We use the Black-Scholes pricing model to value stock option awards. We recognize compensation expense using the straight-line amortization method.

Our non-employee stock-based compensation awards are measured at either the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable. If the fair value of the equity instruments issued is used, it is measured at each reporting date using the stock price and other measurement assumptions as of the earlier of (i) the date at which a commitment for performance by the counterparty to earn the equity instruments is reached, or (ii) the date at which the counterparty's performance is completed.

Registered Common Stock Warrants. We account for registered common stock warrants pursuant to the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially settled in, a company's own stock, on the understanding that in compliance with applicable securities laws, the registered warrants require the issuance of registered securities upon exercise and do not sufficiently preclude an implied right to net cash settlement. We classify registered warrants on the condensed consolidated balance sheet as a current liability, which is revalued at each balance sheet date subsequent to the initial issuance. Determining the appropriate fair-value model and calculating the fair value of registered warrants requires considerable judgment including estimating stock price volatility and expected warrant life. We develop our estimates based on historical data. A small change in the estimates used may have a relatively large change in the estimated valuation. We use the Black-Scholes and Monte Carlo pricing models to value the registered warrants. Changes in the fair market value of the warrants are reflected in the condensed consolidated statement of operations as "Change in fair value of common stock warrants."

Transaction costs associated with the issuance of warrants classified on the condensed consolidated balance sheet as a current liability are expensed immediately and included as part of general and administrative expense on the condensed consolidated statement of operations.

Adoption of Recent Accounting Pronouncements

We describe below recent pronouncements that may have a significant effect on our financial statements. Recent pronouncements that are not anticipated to have an impact on or are unrelated to our financial condition, results of operations, or related disclosures are not discussed.

Accounting Standards Update ("ASU"), No. 2013-02-In February 2013, the Financial Accounting Standards Board ("FASB") issued an ASU which amended the disclosure requirements regarding the reporting of amounts reclassified out of accumulated other comprehensive income. The amendment does not change the current requirement for reporting net income or other comprehensive income, but requires additional disclosures about significant amounts

reclassified out of accumulated other comprehensive income including the effect of the reclassification on the related net income line items. We have adopted ASU 2013-02 prospectively effective January 1, 2013 and the adoption is not expected to have a significant impact on our financial statements as the requirements are disclosure only in nature.

Results of Operations

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Revenue. We had total revenue of $9.5 million and $11.7 million for the three and nine months ended September 30, 2013, respectively, as compared to $855,000 and $3.0 million for the three and nine months ended September 30, 2012, respectively. Revenue primarily consists of license fees, revenue under collaborative research and development arrangements and grants and government contracts.

Revenue from license fees and milestone revenue was $8.5 million and $8.7 million for the three and nine months ended September 30, 2013, respectively, as compared to $129,000 and $387,000 for the three and nine months ended September 30, 2012, respectively. The increase for the respective periods was primarily due to the revenue recognized from our Agreement with Roche entered into in September 2013 (See Note 13).

There was no revenue under collaborative research and development arrangements for the three and nine months ended September 30, 2013 as compared to $116,000 and $116,000 for the three and nine months ended September 30, 2012, respectively. The decrease was due to no work performed under our Collaborative Development and License Agreement with VGX Int'l.

During the three and nine months ended September 30, 2013, we recorded grant and miscellaneous revenue of $992,000 and $3.0 million, respectively, as compared to $610,000 and $2.5 million for the three and nine months ended September 30, 2012, respectively. The increase for the three-month period year over year, was primarily attributable to $357,000 of revenue recognized under our PATH Malaria Vaccine Initiative (“MVI”) contract during the three months ended September 30, 2013 as compared to no revenue recognized for the same period in 2012, due to the initiation of the third amendment in October 2012. PATH is an international nonprofit organization funded by private donors. We have a research program and agreement with the PATH MVI to evaluate in a preclinical feasibility study our SynCon® DNA vaccine development platform to target antigens from Plasmodium species and deliver them intradermally using the CELLECTRA® electroporation device. The initial agreement with MVI was for $685,000 and was completed in February 2010. In September 2010 we entered into an amended agreement with PATH to further this study in non-human primates. The amended agreement had a total value of $804,000 and was completed in August 2011. In October 2012 we entered into a third amendment with PATH MVI for a total value of $887,000 for the conduct of feasibility studies, process development activities, and manufacture of cell banks to be utilized in Phase 1 clinical trials. There were also increases in revenue recognized from our subcontract with the University of Pennsylvania and our NIH research project grant of $139,000 and $44,000, respectively, for the three months ended September 30, 2013 as compared to the same period in 2012, among other small variances. These increases were offset by lower revenue of $179,000 recognized from our contract with the NIAID. The NIAID contract, which was modified in September 2011, has an initial term of five years with two one-year options (period of performance is September 30, 2008 - September 29, 2015 including the two options). The current approved funding of the contract for the five years is $23.0 million with option years six and seven valued at $1.3 million and $1.0 million, respectively, for a total potential value of $25.3 million, and will fund research and development for HIV DNA-based vaccines delivered via our proprietary electroporation system. The increase for the nine-month period year over year, was primarily due to $597,000 of revenue recognized under our PATH MVI contract during the nine months ended September 30, 2013 as compared to no revenue recognized for the same period in 2012, as well as increases in revenue recognized from our U.S. Department of Defense SBIR Grant and subcontract with the University of Pennsylvania of $162,000 and $205,000, respectively. These increases were offset by lower revenue of $522,000 recognized from our contract with the NIAID for the nine-months ended September 30, 2013 as compared to the same period in 2012, among other small variances.

Research and Development Expenses. Research and development expenses for the three and nine months ended September 30, 2013, were $5.4 million and $15.0 million, respectively, as compared to $5.0 million and $13.5 million for the three and nine months ended September 30, 2012, respectively. The increase for the three-month period year over year, was primarily due to the $1.1 million sub-license fees payable based on our up-front payment received from the Roche Agreement entered into in September 2013. The increase was also attributable to $374,000 in higher costs related to work performed for the MVI contract and $111,000 in higher compensation and related expenses. These increases were partially offset by lower clinical expenses of $784,000 related to our ongoing HPV-003 and influenza clinical trials, $243,000 in lower costs related to work performed for the NIAID contract and $110,000 in lower

contract labor expenses, among other variances. The increase for the nine-month period year over year, was primarily due to the $1.1 million sub-license fees payable based on our up-front payment received from the Roche Agreement. The increase was also attributable to $488,000 in higher costs related to work performed for the MVI contract and $364,000 in higher compensation and related expenses. These increases were partially offset by lower clinical expenses of $235,000, $151,000 in lower expensed inventory and $111,000 in lower costs related to work performed for the NIAID contract, among other variances.

General and Administrative Expenses. General and administrative expenses, which include business development expenses and the amortization of intangible assets, for the three and nine months ended September 30, 2013, were $3.3 million and $9.3 million, respectively, as compared to $2.7 million and $7.9 million for the three and nine months ended September 30, 2012, respectively. The increase for the three-month period year over year was primarily due to an increase in consultant stock-

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based compensation, outside consulting services and rent expense related to deferred rent on the new building lease of $246,000, $216,000 and $168,000, respectively, among other variances. The increase for the nine-month period year over year was primarily due to an increase in rent expense of $360,000, transaction costs of $316,000 associated with the issuance of warrants in the March 2013 financing, as well as increases in outside consulting services, consultant stock-based compensation and corporate and patent legal fees of $287,000, $263,000 and $170,000, respectively, among other variances.

Stock-based Compensation. Stock-based compensation cost is measured at the grant date, based on the fair value of the award reduced by estimated forfeitures, and is recognized as expense over the employee's requisite service period. Total employee compensation cost for our stock plans for the three and nine months ended September 30, 2013 was $250,000 and $920,000, respectively. From these amounts, $105,000 and $439,000 were included in research and development expenses and $145,000 and $481,000 were included in general and administrative expenses, for the three and nine months ended September 30, 2013, respectively. Total employee compensation cost for our stock plans for the three and nine months ended September 30, 2012 was $253,000 and $1.0 million, respectively. From these amounts, $117,000 and $477,000 were included in research and development expenses and $136,000 and $551,000 were included in general and administrative expenses, for the three and nine months ended September 30, 2012, respectively. The decrease for the nine-month period year over year was primarily due to a slightly lower fair value of the employee and director stock options granted during the period.

Interest and Other Income, net. Interest and other income, net, for the three and nine months ended September 30, 2013 was $47,000 and $124,000, respectively, as compared to $37,000 and $110,000 for the three and nine months ended September 30, 2012, respectively.

Change in fair value of common stock warrants. The change in fair value of common stock warrants for the three and nine months ended September 30, 2013 was $(35.0 million) and $(39.6 million), respectively, as compared to $(1.1 million) and $(1.1 million) for the three and nine months ended September 30, 2012, respectively. The significant variance is due to the revaluation of registered common stock warrants issued by us in March 2013, December 2011, January 2011 and June 2009. We revalue warrants at each balance sheet date to fair value. Warrants that were exercised during the period were revalued the day prior to exercise and reclassified into stockholders' equity upon exercise. The change in fair value was primarily due to the significant increase in Company stock price during the period. If unexercised, the warrants will expire at various dates between July 2014 and September 2018.

Gain (Loss) from investment in affiliated entity. Gain (loss) is a result of the change in the fair market value of the investment as of September 30, 2013.

Gain on Sale of Assets. The gain on sale of assets is related to the March 2011 Asset Purchase Agreement with OncoSec. The gain recorded during the nine months ended September 30, 2013 is related to the cash received during the period related to the sale, and the gain recorded during 2012 is related to the cash received related to the sale as well as the initial fair value of the warrants received in connection with the second amendment to the Asset Purchase Agreement signed in March 2012 (See Note 6).

Liquidity and Capital Resources

Historically, our primary uses of cash have been to finance research and development activities including clinical trial activities in the oncology, DNA vaccines and other immunotherapy areas of our business. Since inception, we have satisfied our cash requirements principally from proceeds from the sale of equity securities.

Working Capital and Liquidity

As of September 30, 2013 we had cash and short-term investments of $46.2 million and working capital of $37.4 million, as compared to $13.7 million and $7.6 million, respectively, as of December 31, 2012. The increase in cash and short-term investments during the nine months ended September 30, 2013 was primarily due to proceeds received from warrant and stock option exercises, our ATM Sales Agreement and March 2013 financing, offset by expenditures related to our research and development activities and various general and administrative expenses related to legal, consultants, accounting and audit, and corporate development. The increase in working capital is offset by the increase in the valuation of our registered common stock warrants that are classified as a current liability

on the condensed consolidated balance sheet.

Net cash used in operating activities was $16.3 million and $16.8 million for the nine months ended September 30, 2013 and 2012, respectively.

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Net cash (used in) provided by investing activities was $(4.5 million) and $2.8 million for the nine months ended September 30, 2013 and 2012, respectively. The variance was primarily the result of timing differences in short-term investment purchases, sales and maturities.

Net cash provided by financing activities was $48.2 million and $1.2 million for the nine months ended September 30, 2013 and 2012, respectively. The increase was related to proceeds received from our March 2013 financing, warrant and stock option exercises and our ATM Sales Agreement during the period.

During the nine months ended September 30, 2013, warrants and stock options to purchase 22,094,569 shares of common stock were exercised for total proceeds to the Company of $19.1 million.

In March 2013, we completed an underwritten offering of 27,377,266 shares of our common stock and warrants to purchase an aggregate of up to 13,688,633 shares of common stock. The shares and warrants were sold in units at a price of $0.55 per unit, with each unit consisting of one share of common stock and a warrant to purchase 0.50 shares of common stock at an exercise price of $0.7936 per share. The warrants have a term of five and one-half years. The net proceeds, after deducting the underwriters' discounts and other offering expenses, were approximately $14.0 million.

In June 2012, we entered into an "at-the-market" (ATM) sales agreement (the "Sales Agreement") with an outside placement agent (the "Placement Agent") to sell shares of our common stock with aggregate gross proceeds of up to $25.0 million from time to time, through an ATM equity offering program under which the Placement Agent will act as sales agent. During the nine months ended September 30, 2013, we sold 14,011,526 shares of common stock under the ATM Sales Agreement for net proceeds of $15.1 million. As of December 31, 2012 we had sold 9,344,611 shares of common stock under the ATM Sales Agreement for net proceeds of $5.3 million.

As of September 30, 2013, we had an accumulated deficit of $280.3 million. We have operated at a loss since 1994, and we expect to continue to operate at a loss for some time. The amount of the accumulated deficit will continue to increase, as it will be expensive to continue research and development efforts. If these activities are successful and if we receive approval from the FDA to market our DNA vaccine products, then we will need to raise additional funding to market and sell the approved vaccine products and equipment. We cannot predict the outcome of the above matters at this time. We are evaluating potential collaborations as an additional way to fund operations. We believe that current cash and cash equivalents plus short-term investments are sufficient to meet planned working capital requirements into the first quarter of 2016. We will continue to rely on outside sources of financing to meet our capital needs beyond this time.

ITEM 3. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

Market risk represents the risk of loss that may impact our consolidated financial position, results of operations or cash flows due to adverse changes in financial and commodity market prices and rates. We are exposed to market risk primarily in the area of changes in United States interest rates and conditions in the credit markets, and the recent fluctuations in interest rates and availability of funding in the credit markets primarily impact the performance of our investments. We do not have any material foreign currency or other derivative financial instruments. Under our current policies, we do not use interest rate derivative instruments to manage exposure to interest rate changes. We attempt to increase the safety and preservation of our invested principal funds by limiting default risk, market risk and reinvestment risk. We mitigate default risk by investing in investment grade securities.

Fair Value measurements

We account for our common stock warrants pursuant to the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially settled in, a company's own stock, on the understanding that in compliance with applicable securities laws, the registered warrants require the issuance of registered securities upon exercise and do not sufficiently preclude an implied right to net cash settlement. We classify registered warrants on the condensed consolidated balance sheet as a current liability that is revalued at each balance sheet date subsequent to the initial issuance.

The investment in affiliated entity represents our ownership interest in the Korean based company, VGX Int'l. We report this investment at fair value on the condensed consolidated balance sheet using the closing price of VGX Int'l's shares of common stock as listed on the Korean Stock Exchange.

Common stock warrants that we have received to purchase shares of OncoSec are classified on the condensed consolidated balance sheet as a long-term asset that is revalued at each balance sheet date subsequent to the initial receipt.

Foreign Currency Risk

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We have operated primarily in the United States and most transactions during the three and nine months ended September 30, 2013, have been made in United States dollars. Accordingly, we have not had any material exposure to foreign currency rate fluctuations, with the exception of the valuation of our equity investment in VGX Int'l which is denominated in South Korean Won. We do not have any foreign currency hedging instruments in place.

Certain transactions related to us are denominated primarily in foreign currencies, including Euros, British Pounds, Canadian Dollars and South Korean Won. As a result, our financial results could be affected by factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets where we conduct business, including the impact of the existing crisis in the global financial markets in such countries and the impact on both the United States dollar and the noted foreign currencies.

We do not use derivative financial instruments for speculative purposes. We do not engage in exchange rate hedging or hold or issue foreign exchange contracts for trading purposes. Currently, we do not expect the impact of fluctuations in the relative fair value of other currencies to be material in 2013.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures, which are designed to ensure that information required to be disclosed in the reports we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer, or CEO, and Chief Financial Officer, or CFO, as appropriate to allow timely decisions regarding required disclosures.

Based on an evaluation carried out as of the end of the period covered by this quarterly report, under the supervision and with the participation of our management, including our CEO and CFO, our CEO and CFO have concluded that, as of the end of such period, our disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) were effective as of September 30, 2013.

Changes in Internal Control over Financial Reporting

In connection with the Collaboration, Option and License Agreement entered into with Roche in September 2013, we have developed additional internal controls over our process for accounting for significant contracts. Except for these additional controls, there have been no significant changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934) that occurred during the quarter ended September 30, 2013, 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
Not applicable.

ITEM 1A. RISK FACTORS
The following Risk Factors do not reflect any material changes to the Risk Factors set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2012, which we filed with the SEC on March 18, 2013. You should carefully consider and evaluate each of the following factors as well as the other information in this quarterly report on Form 10-Q, including our financial statements and the related notes, in evaluating our business and prospects. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business operations. If any of the following risks actually occur, our business and financial results could be harmed. In that case, the trading price of our common stock could decline. You should also consider the more detailed description of our business contained in our annual report on Form 10-K for the year ended December 31, 2012.

Risks Related to Our Business and Industry

We have incurred losses since inception, expect to incur significant net losses in the foreseeable future and may never become profitable.

We have experienced significant operating losses to date; as of September 30, 2013 our accumulated deficit was approximately $280.3 million. We have generated limited revenues, primarily consisting of license and grant revenue, and interest income. We expect to continue to incur substantial additional operating losses for at least the next several years as we advance our clinical trials and research and development activities. We may never successfully commercialize our vaccine product candidates or electroporation-based synthetic vaccine delivery technology and thus may never have any significant future revenues or achieve and sustain profitability. We believe that current cash and cash equivalents plus short-term investments are sufficient to meet planned working capital requirements into the first quarter of 2016. We will continue to rely on outside sources of financing to meet our capital needs beyond this time.

We have limited sources of revenue and our success is dependent on our ability to develop our vaccine and other product candidates and electroporation equipment.

We do not sell any products and may not have any other products commercially available for several years, if at all. Our ability to generate future revenues depends heavily on our success in:

- developing and securing United States and/or foreign regulatory approvals for our product candidates, including securing regulatory approval for conducting clinical trials with product candidates;
- developing our electroporation-based DNA delivery technology; and
- commercializing any products for which we receive approval from the FDA and foreign regulatory authorities.

Our electroporation equipment and product candidates will require extensive additional clinical study and evaluation, regulatory approval in multiple jurisdictions, substantial investment and significant marketing efforts before we generate any revenues from product sales. We are not permitted to market or promote our electroporation equipment and product candidates before we receive regulatory approval from the FDA or comparable foreign regulatory authorities. If we do not receive regulatory approval for and successfully commercialize any products, we will not generate any revenues from sales of electroporation equipment and products, and we may not be able to continue our operations.

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None of our human vaccine product candidates has been approved for sale, and we may not develop commercially successful vaccine products.

Our human vaccine programs are in the early stages of research and development, and currently include vaccine product candidates in discovery, pre-clinical studies and Phase I and II clinical studies. There are limited data regarding the efficiency of synthetic vaccines compared with conventional vaccines, and we must conduct a substantial amount of additional research and development before any regulatory authority will approve any of our vaccine product candidates. The success of our efforts to develop and commercialize our vaccine product candidates could fail for a number of reasons. For example, we could experience delays in product development and clinical trials. Our vaccine product candidates could be found to be ineffective or unsafe, or otherwise fail to receive necessary regulatory clearances. The products, if safe and effective, could be difficult to manufacture on a large scale or uneconomical to market, or our competitors could develop superior vaccine products more quickly and efficiently or more effectively market their competing products.

In addition, adverse events, or the perception of adverse events, relating to vaccines and vaccine delivery technologies may negatively impact our ability to develop commercially successful vaccine products. For example, pharmaceutical companies have been subject to claims that the use of some pediatric vaccines has caused personal injuries, including brain damage, central nervous system damage and autism. These and other claims may influence public perception of the use of vaccine products and could result in greater governmental regulation, stricter labeling requirements and potential regulatory delays in the testing or approval of our potential products.

We will need substantial additional capital to develop our synthetic vaccine and electroporation delivery technology and other product candidates and for our future operations.

Conducting the costly and time consuming research, pre-clinical and clinical testing necessary to obtain regulatory approvals and bring our vaccine delivery technology and product candidates to market will require a commitment of substantial funds in excess of our current capital. Our future capital requirements will depend on many factors, including, among others:

- the progress of our current and new product development programs;
- the progress, scope and results of our pre-clinical and clinical testing;
- the time and cost involved in obtaining regulatory approvals;
- the cost of manufacturing our products and product candidates;
- the cost of prosecuting, enforcing and defending against patent infringement claims and other intellectual property rights;
- competing technological and market developments; and
- our ability and costs to establish and maintain collaborative and other arrangements with third parties to assist in potentially bringing our products to market.

Additional financing may not be available on acceptable terms, or at all. Domestic and international capital markets have been experiencing heightened volatility and turmoil, making it more difficult to raise capital through the issuance of equity securities. Furthermore, as a result of the recent volatility in the capital markets, the cost and availability of credit has been and may continue to be adversely affected by illiquid credit markets and wider credit spreads. Concern about the stability of the markets generally and the strength of counterparties specifically has led many lenders and institutional investors to reduce, and in some cases cease to provide, funding to borrowers. To the extent we are able to raise additional capital through the sale of equity securities or we issue securities in connection with another transaction, the ownership position of existing stockholders could be substantially diluted. If additional funds are raised through the issuance of preferred stock or debt securities, these securities are likely to have rights, preferences and privileges senior to our common stock and may involve significant fees, interest expense, restrictive covenants and the granting of security interests in our assets. Fluctuating interest rates could also increase the costs of any debt financing we may obtain. Raising capital through a licensing or other transaction involving our intellectual property could require us to relinquish valuable intellectual property rights and thereby sacrifice long-term value for short-term liquidity.

Our failure to successfully address ongoing liquidity requirements would have a substantially negative impact on our business. If we are unable to obtain additional capital on acceptable terms when needed, we may need to take actions

that adversely affect our business, our stock price and our ability to achieve cash flow in the future, including possibly surrendering our rights to some technologies or product opportunities, delaying our clinical trials or curtailing or ceasing operations.

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We depend upon key personnel, who may terminate their employment with us at any time, and we may need to hire additional qualified personnel in order to obtain financing, pursue collaborations or develop or market our product candidates.

The success of our business strategy will depend to a significant degree upon the continued services of key management, technical and scientific personnel and our ability to attract and retain additional qualified personnel and managers, including personnel with expertise in clinical trials, government regulation, manufacturing, marketing and other areas. Competition for qualified personnel is intense among companies, academic institutions and other organizations. If we are unable to attract and retain key personnel and advisors, it may negatively affect our ability to successfully develop, test, commercialize and market our products and product candidates.

We face intense and increasing competition and many of our competitors have significantly greater resources and experience.

Many other companies are pursuing other forms of treatment or prevention for diseases that we target. For example, many of our competitors are working on developing and testing H5N1, H1N1 and universal influenza vaccines, and several H1N1 vaccines developed by our competitors have been approved for human use. Our competitors and potential competitors include large pharmaceutical and medical device companies and more established biotechnology companies. These companies have significantly greater financial and other resources and greater expertise than us in research and development, securing government contracts and grants to support research and development efforts, manufacturing, pre-clinical and clinical testing, obtaining regulatory approvals and marketing. This may make it easier for them to respond more quickly than us to new or changing opportunities, technologies or market needs. Many of these competitors operate large, well-funded research and development programs and have significant products approved or in development. Small companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical companies or through acquisition or development of intellectual property rights. Our potential competitors also include academic institutions, governmental agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for product and clinical development and marketing. Research and development by others may seek to render our technologies or products obsolete or noncompetitive.

If we lose or are unable to secure collaborators or partners, or if our collaborators or partners do not apply adequate resources to their relationships with us, our product development and potential for profitability will suffer.

We have entered into, or may enter into, distribution, co-promotion, partnership, sponsored research and other arrangements for development, manufacturing, sales, marketing and other commercialization activities relating to our products. For example, in the past we have entered into a license and collaboration agreement with Merck. The amount and timing of resources applied by our collaborators are largely outside of our control.

Wyeth terminated one of our past collaboration agreements. If any of our other current or future collaborators breaches or terminates our agreements, or fails to conduct our collaborative activities in a timely manner, our commercialization of products could be diminished or blocked completely. It is possible that collaborators will change their strategic focus, pursue alternative technologies or develop alternative products, either on their own or in collaboration with others. Further, we may be forced to fund programs that were previously funded by our collaborators, and we may not have, or be able to access, the necessary funding. The effectiveness of our partners, if any, in marketing our products will also affect our revenues and earnings.

We desire to enter into new collaborative agreements. However, we may not be able to successfully negotiate any additional collaborative arrangements and, if established, these relationships may not be scientifically or commercially successful. Our success in the future depends in part on our ability to enter into agreements with other highly-regarded organizations. This can be difficult due to internal and external constraints placed on these organizations. Some organizations may have insufficient administrative and related infrastructure to enable collaborations with many companies at once, which can extend the time it takes to develop, negotiate and implement a collaboration. Once news of discussions regarding possible collaborations are known in the medical community, regardless of whether the news is accurate, failure to announce a collaborative agreement or the entity's announcement of a collaboration with another entity may result in adverse speculation about us, resulting in harm to our reputation and our business.

Disputes could also arise between us and our existing or future collaborators, as to a variety of matters, including financial and intellectual property matters or other obligations under our agreements. These disputes could be both expensive and time-consuming and may result in delays in the development and commercialization of our products or could damage our relationship with a collaborator.

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A small number of licensing partners and government contracts account for a substantial portion of our revenue.
We currently derive, and in the past we have derived, a significant portion of our revenue from a limited number of licensing partners and government grants and contracts. For example, during the year ended December 31, 2012, the NIAID and VGX Int'l accounted for approximately 69% and 14%, of our consolidated revenue, respectively. If we fail to sign additional future contracts with major licensing partners and the government, if a contract is delayed or deferred, or if an existing contract expires or is canceled and we fail to replace the contract with new business, our revenue would be adversely affected.
We have agreements with government agencies, which are subject to termination and uncertain future funding.
We have entered into agreements with government agencies, such as the NIAID and the US Army, and we intend to continue entering into these agreements in the future. Our business is partially dependent on the continued performance by these government agencies of their responsibilities under these agreements, including adequate continued funding of the agencies and their programs. We have no control over the resources and funding that government agencies may devote to these agreements, which may be subject to annual renewal and which generally may be terminated by the government agencies at any time.
Government agencies may fail to perform their responsibilities under these agreements, which may cause them to be terminated by the government agencies. In addition, we may fail to perform our responsibilities under these agreements. Many of our government agreements are subject to audits, which may occur several years after the period to which the audit relates. If an audit identifies significant unallowable costs, we could incur a material charge to our earnings or reduction in our cash position. As a result, we may be unsuccessful entering, or ineligible to enter, into future government agreements.
Our quarterly operating results may fluctuate significantly.
We expect our operating results to be subject to quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

- variations in the level of expenses related to our electroporation equipment, product candidates or future development programs;
- expenses related to corporate transactions, including ones not fully completed;
- addition or termination of clinical trials or funding support;
- any intellectual property infringement lawsuit in which we may become involved;
- any legal claims that may be asserted against us or any of our officers;
- regulatory developments affecting our electroporation equipment and product candidates or those of our competitors;
- our execution of any collaborative, licensing or similar arrangements, and the timing of payments we may make or receive under these arrangements; and
- if any of our products receives regulatory approval, the levels of underlying demand for our products.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.
If we are unable to obtain FDA approval of our products, we will not be able to commercialize them in the United States.
We need FDA approval prior to marketing our electroporation equipment and products in the United States. If we fail to obtain FDA approval to market our electroporation equipment and product candidates, we will be unable to sell our products in the United States, which will significantly impair our ability to generate any revenues.
This regulatory review and approval process, which includes evaluation of pre-clinical studies and clinical trials of our products as well as the evaluation of our manufacturing processes and our third-party contract manufacturers' facilities, is lengthy, expensive and uncertain. To receive approval, we must, among other things, demonstrate with substantial evidence from well-controlled clinical trials that our electroporation equipment and product candidates are both safe and effective for each indication for which approval is sought. Satisfaction of the approval requirements typically takes several years and the time needed to satisfy them may vary substantially, based on the type, complexity

and novelty of the product. We do not know if or when we might receive regulatory approvals for our electroporation equipment and any of our product candidates currently under development. Moreover, any approvals that we obtain may not cover all of the clinical indications for which we

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are seeking approval, or could contain significant limitations in the form of narrow indications, warnings, precautions or contra-indications with respect to conditions of use. In such event, our ability to generate revenues from such products would be greatly reduced and our business would be harmed.

The FDA has substantial discretion in the approval process and may either refuse to consider our application for substantive review or may form the opinion after review of our data that our application is insufficient to allow approval of our electroporation equipment and product candidates. If the FDA does not consider or approve our application, it may require that we conduct additional clinical, pre-clinical or manufacturing validation studies and submit that data before it will reconsider our application. Depending on the extent of these or any other studies, approval of any applications that we submit may be delayed by several years, or may require us to expend more resources than we have available. It is also possible that additional studies, if performed and completed, may not be successful or considered sufficient by the FDA for approval or even to make our applications approvable. If any of these outcomes occur, we may be forced to abandon one or more of our applications for approval, which might significantly harm our business and prospects.

It is possible that none of our products or any product we may seek to develop in the future will ever obtain the appropriate regulatory approvals necessary for us or our collaborators to commence product sales. Any delay in obtaining, or an inability to obtain, applicable regulatory approvals would prevent us from commercializing our products, generating revenues and achieving and sustaining profitability.

Clinical trials involve a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

Clinical testing is expensive and can take many years to complete, and its outcome is uncertain. Failure can occur at any time during the clinical trial process. The results of pre-clinical studies and early clinical trials of our products may not be predictive of the results of later-stage clinical trials. Results from one study may not be reflected or supported by the results of similar studies. Results of an animal study may not be indicative of results achievable in human studies. Human-use equipment and product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through pre-clinical studies and initial clinical testing. The time required to obtain approval by the FDA and similar foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials, depending upon numerous factors. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change. We have not obtained regulatory approval for any human-use products.

Our products could fail to complete the clinical trial process for many reasons, including the following:

- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that our electroporation equipment and a product candidate are safe and effective for any indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may not be successful in enrolling a sufficient number of participants in clinical trials;
- we may be unable to demonstrate that our electroporation equipment and a product candidate's clinical and other benefits outweigh its safety risks;
- we may be unable to demonstrate that our electroporation equipment and a product candidate presents an advantage over existing therapies, or over placebo in any indications for which the FDA requires a placebo-controlled trial;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from pre-clinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a new drug application or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of us or third-party manufacturers with which we or our collaborators contract for clinical and commercial supplies; and
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the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

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Delays in the commencement or completion of clinical testing could result in increased costs to us and delay or limit our ability to generate revenues.

Delays in the commencement or completion of clinical testing could significantly affect our product development costs. We do not know whether planned clinical trials will begin on time or be completed on schedule, if at all. In addition, ongoing clinical trials may not be completed on schedule, or at all. The commencement and completion of clinical trials can be delayed for a number of reasons, including delays related to:

- obtaining regulatory approval to commence a clinical trial;
- adverse results from third party clinical trials involving gene based therapies and the regulatory response thereto;
- reaching agreement on acceptable terms with prospective CROs and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- future bans or stricter standards imposed on gene based therapy clinical trials;
- manufacturing sufficient quantities of our electroporation equipment and product candidates for use in clinical trials;
- obtaining institutional review board, or IRB, approval to conduct a clinical trial at a prospective site;
- slower than expected recruitment and enrollment of patients to participate in clinical trials for a variety of reasons, including competition from other clinical trial programs for similar indications;
- conducting clinical trials with sites internationally due to regulatory approvals and meeting international standards;
- retaining patients who have initiated a clinical trial but may be prone to withdraw due to side effects from the therapy, lack of efficacy or personal issues, or who are lost to further follow-up; and
- collecting, reviewing and analyzing our clinical trial data.

Clinical trials may also be delayed as a result of ambiguous or negative interim results. In addition, a clinical trial may be suspended or terminated by us, the FDA, the IRB overseeing the clinical trial at issue, any of our clinical trial sites with respect to that site, or other regulatory authorities due to a number of factors, including:

- failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols;
- inspection of the clinical trial operations or trial sites by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;
- unforeseen safety issues; and
- lack of adequate funding to continue the clinical trial.

If we experience delays in completion of, or if we terminate, any of our clinical trials, the commercial prospects for our electroporation equipment and our product candidates may be harmed and our ability to generate product revenues will be delayed. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of a product candidate. Further, delays in the commencement or completion of clinical trials may adversely affect the trading price of our common stock.

We and our collaborators rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we and our collaborators may not be able to obtain regulatory approval for or commercialize our product candidates.

We and our collaborators have entered into agreements with CROs to provide monitors for and to manage data for our on-going clinical programs. We and the CROs conducting clinical trials for our electroporation equipment and product candidates are required to comply with current good clinical practices, or GCPs, regulations and guidelines enforced by the FDA for all of our products in clinical development. The FDA enforces GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or the CROs conducting clinical trials of our product candidates fail to comply with applicable GCPs, the clinical data generated in the clinical trials may be deemed unreliable and the FDA may require additional clinical trials before approving any marketing applications.

If any relationships with CROs terminate, we or our collaborators may not be able to enter into arrangements with alternative CROs. In addition, these third-party CROs are not our employees, and we cannot control whether or not they devote sufficient time and resources to our on-going clinical programs or perform trials efficiently. These CROs may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical studies or other drug development activities, which could harm our competitive position. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be

replaced, or if the quality or accuracy of the

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clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements, or for other reasons, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed. Cost overruns by or disputes with our CROs may significantly increase our expenses.

Even if our products receive regulatory approval, they may still face future development and regulatory difficulties.

Even if United States regulatory approval is obtained, the FDA may still impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-approval studies. This governmental oversight may be particularly strict with respect to gene based therapies. Our products will also be subject to ongoing FDA requirements governing the labeling, packaging, storage, advertising, promotion, record keeping and submission of safety and other post-market information. In addition, manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing practices, or cGMP, regulations. If we or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturer or us, including requiring withdrawal of the product from the market or suspension of manufacturing. If we, our product candidates or the manufacturing facilities for our product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue Warning Letters or untitled letters;
- impose civil or criminal penalties;
- suspend regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve pending applications or supplements to applications filed by us;
- impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products or require us to initiate a product recall.

Even if our products receive regulatory approval in the United States, we may never receive approval or commercialize our products outside of the United States.

In order to market any electroporation equipment and product candidates outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks detailed above regarding FDA approval in the United States as well as other risks. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. Failure to obtain regulatory approval in other countries or any delay or setback in obtaining such approval could have the same adverse effects detailed above regarding FDA approval in the United States. Such effects include the risks that our product candidates may not be approved for all indications requested, which could limit the uses of our product candidates and have an adverse effect on their commercial potential or require costly, post-marketing follow-up studies.

We face potential product liability exposure and, if successful claims are brought against us, we may incur substantial liability.

The use of our electroporation equipment and synthetic vaccine candidates in clinical trials and the sale of any products for which we obtain marketing approval expose us to the risk of product liability claims. Product liability claims might be brought against us by consumers, health care providers, pharmaceutical companies or others selling or otherwise coming into contact with our products. For example, pharmaceutical companies have been subject to claims that the use of some pediatric vaccines has caused personal injuries, including brain damage, central nervous system damage and autism, and these companies have incurred material costs to defend these claims. If we cannot successfully defend ourselves against product liability claims, we could incur substantial liabilities. In addition,

regardless of merit or eventual outcome, product liability claims may result in:

- decreased demand for our product candidates;
- impairment of our business reputation;
- withdrawal of clinical trial participants;

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- costs of related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- loss of revenues; and
- inability to commercialize our products.

We have obtained product liability insurance coverage for our clinical trials, but our insurance coverage may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive, and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. On occasion, large judgments have been awarded in class action lawsuits based on products that had unanticipated side effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our business.

We currently have no marketing and sales organization and have no experience in marketing products. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our products, we may not be able to generate product revenues.

We currently do not have a sales organization for the marketing, sales and distribution of our electroporation equipment and product candidates. In order to commercialize any products, we must build our marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. We contemplate establishing our own sales force or seeking third-party partners to sell our products. The establishment and development of our own sales force to market any products we may develop will be expensive and time consuming and could delay any product launch, and we may not be able to successfully develop this capability. We will also have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel. To the extent we rely on third parties to commercialize our approved products, if any, we will receive lower revenues than if we commercialized these products ourselves. In addition, we may have little or no control over the sales efforts of third parties involved in our commercialization efforts. In the event we are unable to develop our own marketing and sales force or collaborate with a third-party marketing and sales organization, we would not be able to commercialize our product candidates which would negatively impact our ability to generate product revenues.

If any of our products for which we receive regulatory approval does not achieve broad market acceptance, the revenues that we generate from their sales will be limited.

The commercial success of our electroporation equipment and product candidates for which we obtain marketing approval from the FDA or other regulatory authorities will depend upon the acceptance of these products by both the medical community and patient population. Coverage and reimbursement of our product candidates by third-party payors, including government payors, generally is also necessary for optimal commercial success. The degree of market acceptance of any of our approved products will depend on a number of factors, including:

- our ability to provide acceptable evidence of safety and efficacy;
- the relative convenience and ease of administration;
- the prevalence and severity of any actual or perceived adverse side effects;
- limitations or warnings contained in a product's FDA-approved labeling, including, for example, potential “black box” warnings
- availability of alternative treatments;
- pricing and cost effectiveness;
- the effectiveness of our or any future collaborators' sales and marketing strategies;
- our ability to obtain sufficient third-party coverage or reimbursement; and
- the willingness of patients to pay out of pocket in the absence of third-party coverage.

If our electroporation equipment and product candidates are approved but do not achieve an adequate level of acceptance by physicians, health care payors and patients, we may not generate sufficient revenue from these products, and we may not become or remain profitable. In addition, our efforts to educate the medical community and

third-party payors on the benefits of our product candidates may require significant resources and may never be successful.

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We are subject to uncertainty relating to reimbursement policies which, if not favorable to our product candidates, could hinder or prevent our products' commercial success.

Our ability to commercialize our electroporation equipment and product candidates successfully will depend in part on the extent to which governmental authorities, private health insurers and other third-party payors establish appropriate coverage and reimbursement levels for our product candidates and related treatments. As a threshold for coverage and reimbursement, third-party payors generally require that drug products have been approved for marketing by the FDA. Third-party payors also are increasingly challenging the effectiveness of and prices charged for medical products and services. We may not be able to obtain third-party coverage or reimbursement for our products in whole or in part.

Healthcare reform measures could hinder or prevent our products' commercial success.

In both the United States and certain foreign jurisdictions there have been, and we anticipate there will continue to be, a number of legislative and regulatory changes to the healthcare system that could impact our ability to sell any of our products profitably. In the United States, the Federal government recently passed healthcare reform legislation, the Patient Protection and Affordable Care Act, or the ACA. The provisions of the ACA are effective on various dates over the next several years. While many of the details regarding the implementation of the ACA are yet to be determined, we believe there will be continuing trends towards expanding coverage to more individuals, containing health care costs and improving quality. At the same time, the rebates, discounts, taxes and other costs associated with the ACA are expected to be a significant cost to the pharmaceutical industry.

The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to make and implement healthcare reforms may adversely affect:

- our ability to set a price we believe is fair for our products;
- our ability to generate revenues and achieve or maintain profitability;
- the availability of capital; and
- our ability to obtain timely approval of our products.

If we fail to comply with applicable healthcare regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

Certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights may be applicable to our business. We could be subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states in which we conduct our business, without limitation. The laws that may affect our ability to operate include:

- the federal healthcare program Anti-Kickback Statute, which prohibits, among other things, people from soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;
- federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;
- the ACA expands the government's investigative and enforcement authority and increases the penalties for fraud and abuse, including amendments to both the False Claims Act and the Anti-Kickback Statute to make it easier to bring suit under those statutes;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which prohibits executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters and which also imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information;
- the Federal Food, Drug, and Cosmetic Act, which among other things, strictly regulates drug product marketing, prohibits manufacturers from marketing drug products for off-label use and regulates the distribution of drug samples; and
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers, and state laws governing the

privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

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Additionally, the compliance environment is changing, with more states, such as California and Massachusetts, mandating implementation of compliance programs, compliance with industry ethics codes, and spending limits, and other states, such as Vermont, Maine, and Minnesota requiring reporting to state governments of gifts, compensation, and other remuneration to physicians. Under the ACA, starting in 2012, pharmaceutical companies will be required to record any transfers of value made to doctors and teaching hospitals and to disclose such data to HHS, with initial disclosure to HHS due in 2013. These laws all provide for penalties for non-compliance. The shifting regulatory environment, along with the requirement to comply with multiple jurisdictions with different compliance and/or reporting requirements, increases the possibility that a company may run afoul of one or more laws.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security and fraud laws may prove costly.

If we and the contract manufacturers upon whom we rely fail to produce our systems and product candidates in the volumes that we require on a timely basis, or fail to comply with stringent regulations, we may face delays in the development and commercialization of our electroporation equipment and product candidates.

We manufacture some components of our electroporation systems and utilize the services of contract manufacturers to manufacture the remaining components of these systems and our product supplies for clinical trials. The manufacture of our systems and product supplies requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers often encounter difficulties in production, particularly in scaling up for commercial production. These problems include difficulties with production costs and yields, quality control, including stability of the equipment and product candidates and quality assurance testing, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. If we or our manufacturers were to encounter any of these difficulties or our manufacturers otherwise fail to comply with their obligations to us, our ability to provide our electroporation equipment to our partners and products to patients in our clinical trials or to commercially launch a product would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of our clinical trials, increase the costs associated with maintaining our clinical trial program and, depending upon the period of delay, require us to commence new trials at significant additional expense or terminate the trials completely.

In addition, all manufacturers of our products must comply with cGMP requirements enforced by the FDA through its facilities inspection program. These requirements include, among other things, quality control, quality assurance and the generation and maintenance of records and documentation. Manufacturers of our products may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. We have little control over our manufacturers' compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any product is compromised due to our or our manufacturers' failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our products, and we may be held liable for any injuries sustained as a result. Any of these factors could cause a delay of clinical trials, regulatory submissions, approvals or commercialization of our products, entail higher costs or result in our being unable to effectively commercialize our products. Furthermore, if our manufacturers fail to deliver the required commercial quantities on a timely basis, pursuant to provided specifications and at commercially reasonable prices, we may be unable to meet demand for our products and would lose potential revenues.

Our failure to successfully acquire, develop and market additional product candidates or approved products would impair our ability to grow.

We may acquire, in-license, develop and/or market additional products and product candidates. The success of these actions depends partly upon our ability to identify, select and acquire promising product candidates and products.

The process of proposing, negotiating and implementing a license or acquisition of a product candidate or approved product is lengthy and complex. Other companies, including some with substantially greater financial, marketing and sales resources, may compete with us for the license or acquisition of product candidates and approved products. We have limited resources to identify and execute the acquisition or in-licensing of third-party products, businesses and technologies and integrate them into our current infrastructure. Moreover, we may devote resources to potential acquisitions or in-licensing

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opportunities that are never completed, or we may fail to realize the anticipated benefits of such efforts. We may not be able to acquire the rights to additional product candidates on terms that we find acceptable, or at all.

In addition, future acquisitions may entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of our business and diversion of our management's time and attention to develop acquired products or technologies;
- incurrence of substantial debt or dilutive issuances of securities to pay for acquisitions;
- higher than expected acquisition and integration costs;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired businesses due to changes in management and ownership; and
- inability to retain key employees of any acquired businesses.

Further, any product candidate that we acquire may require additional development efforts prior to commercial sale, including extensive clinical testing and approval by the FDA and applicable foreign regulatory authorities. All product candidates are prone to risks of failure typical of product development, including the possibility that a product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities.

Our business involves the use of hazardous materials and we and our third-party manufacturers must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our and our third-party manufacturers' activities involve the controlled storage, use and disposal of hazardous materials, including the components of our product candidates and other hazardous compounds. We and our manufacturers are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. In the event of an accident, state or federal authorities may curtail the use of these materials and interrupt our business operations. If we are subject to any liability as a result of our or our third-party manufacturers' activities involving hazardous materials, our business and financial condition may be adversely affected.

We may be subject to stockholder litigation, which would harm our business and financial condition.

We may have actions brought against us by stockholders relating to the Merger, past transactions, changes in our stock price or other matters. Any such actions could give rise to substantial damages, and thereby have a material adverse effect on our consolidated financial position, liquidity, or results of operations. Even if an action is not resolved against us, the uncertainty and expense associated with stockholder actions could harm our business, financial condition and reputation. Litigation can be costly, time-consuming and disruptive to business operations. The defense of lawsuits could also result in diversion of our management's time and attention away from business operations, which could harm our business.

Our results of operations and liquidity needs could be materially affected by market fluctuations and general economic conditions.

Our results of operations could be materially affected by economic conditions generally, both in the United States and elsewhere around the world. Recently, concerns over inflation, energy costs, geopolitical issues, the availability and cost of credit, the United States mortgage market and a declining residential real estate market in the United States have contributed to increased volatility and diminished expectations for the economy and the markets going forward. These factors, combined with volatile oil prices, declining business and consumer confidence and increased unemployment, have precipitated an economic recession. Domestic and international capital markets have also been experiencing heightened volatility and turmoil. These events and the continuing market upheavals may have an adverse effect on us. In the event of a continuing market downturn, our results of operations could be adversely affected. Our future cost of equity or debt capital and access to the capital markets could be adversely affected, and our stock price could decline. There may be disruption in or delay in the performance of our third-party contractors and suppliers. If our contractors, suppliers and partners are unable to satisfy their contractual commitments, our business could suffer. In addition, we maintain significant amounts of cash and cash equivalents at one or more

financial institutions that are in excess of federally insured limits. Given the current instability of financial institutions, we may experience losses on these deposits.

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Risks Related to Our Intellectual Property

It is difficult and costly to generate and protect our intellectual property and our proprietary technologies, and we may not be able to ensure their protection.

Our commercial success will depend in part on obtaining and maintaining patent, trademark, trade secret, and other intellectual property protection relating to our electroporation equipment and product candidates, as well as successfully defending these intellectual property rights against third-party challenges.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. The laws and regulations regarding the breadth of claims allowed in biotechnology patents has evolved over recent years and continues to undergo review and revision, both in the United States. The biotechnology patent situation outside the United States can be even more uncertain depending on the country. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our licensed patents, our patents or in third-party patents, nor can we predict the likelihood of our patents surviving a patent validity challenge.

The degree of future protection for our intellectual property rights is uncertain, because legal decision-making can be unpredictable, thereby often times resulting in limited protection, which may not adequately protect our rights or permit us to gain or keep our competitive advantage, or resulting in an invalid or unenforceable patent. For example:

- we, or the parties from whom we have acquired or licensed patent rights, may not have been the first to file the underlying patent applications or the first to make the inventions covered by such patents;
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