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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2011

OR

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

For the transition period from to

Commission file number 001-14895

AVI BIOPHARMA, INC.

(Exact name of registrant as specified in its charter)

Oregon	**93-0797222**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
3450 Monte Villa Parkway, Suite 101, Bothell, Washington	**98021**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (425) 354-5038

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

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

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

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐ (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 Exchange Act). Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Common Stock with $0.0001 par value	**135,743,120**
(Class)	(Outstanding as of October 26, 2011)

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements.

AVI BIOPHARMA, INC.
(A Development Stage Company)
BALANCE SHEETS
(unaudited)
(in thousands, except per share data)

	September 30, 2011	December 31, 2010
Assets		
Current Assets:		
Cash and cash equivalents	$ 46,356	$ 33,589
Accounts receivable	4,267	3,224
Other current assets	1,322	1,025
Total Current Assets	51,945	37,838
Property held for sale	1,856	1,965
Property and Equipment, net of accumulated depreciation and amortization of $15,542 and $14,963	2,445	2,070
Patent Costs, net of accumulated amortization of $1,901 and $1,742	4,698	3,980
Other assets	139	123
Total Assets	$ 61,083	$ 45,976
Liabilities and Shareholders' Equity (Deficit)		
Current Liabilities:		
Accounts payable	$ 7,899	$ 1,311
Accrued employee compensation	2,250	2,015
Long-term debt, current portion	84	81
Warrant valuation	12,889	39,111
Deferred revenue	3,304	3,304
Other liabilities	105	35
Total Current Liabilities	26,531	45,857
Commitments and Contingencies	—	—
Long-term debt, non-current portion	1,778	1,842
Other long-term liabilities	1,022	1,094
Shareholders' Equity (Deficit):		
Preferred stock, $.0001 par value, 20,000,000 shares authorized; none issued and outstanding	—	—
Common stock, $.0001 par value, 300,000,000 and 200,000,000 shares authorized; 135,734,120 and 112,352,452 issued and outstanding	13	11
Additional paid-in capital	340,293	304,818
Deficit accumulated during the development stage	(308,554)	(307,646)
Total Shareholders' Equity (Deficit)	31,752	(2,817)
Total Liabilities and Shareholders' Equity (Deficit)	$ 61,083	$ 45,976

See accompanying notes to financial statements.

AVI BIOPHARMA, INC.
(A Development Stage Company)
STATEMENTS OF OPERATIONS
(unaudited)
(in thousands, except per share amounts)

	Three months ended September 30,		Nine months ended September 30,		July 22, 1980 (Inception) through
	2011	2010	2011	2010	September 30, 2011
Revenues from license fees, grants and research contracts	$ 7,524	$ 8,702	$ 33,405	$ 13,903	$ 122,634
Operating expenses:					
Research and development	15,610	9,059	48,161	22,080	314,565
General and administrative	3,185	3,440	12,171	11,017	100,573
Acquired in-process research and development	—	—	—	—	29,461
Operating loss	(11,271)	(3,797)	(26,927)	(19,194)	(321,965)
Other non-operating (loss) income:					
Interest (expense) income and other, net	199	82	440	170	9,022
(Increase) decrease on warrant valuation	7,052	(3,578)	25,579	(5,509)	17,527
Realized gain on sale of short-term securities—available-for-sale	—	—	—	—	3,863
Write-down of short-term securities—available-for-sale	—	—	—	—	(17,001)
	7,251	(3,496)	26,019	(5,339)	13,411
Net loss and comprehensive loss	$ (4,020)	$ (7,293)	$ (908)	$ (24,533)	$ (308,554)
Net loss per share—basic and diluted	$ (0.03)	$ (0.07)	$ (0.01)	$ (0.22)	
Weighted average number of common shares outstanding for computing basic and diluted loss per share (in thousands)	135,738	111,767	127,523	110,863	

See accompanying notes to financial statements.

AVI BIOPHARMA, INC.
(A Development Stage Company)
STATEMENTS OF CASH FLOWS
(unaudited)
(in thousands)

	Nine months ended September 30, 2011	Nine months ended September 30, 2010	For the Period July 22, 1980 (Inception) through September 30, 2011
Cash flows from operating activities:			
Net loss and comprehensive loss	$ (908)	$ (24,533)	$ (308,554)
Adjustments to reconcile net loss to net cash flows used in operating activities:			
Depreciation and amortization	763	1,053	19,908
Loss on disposal of assets	161	274	2,242
Realized gain on sale of short-term securities— available-for-sale	—	—	(3,863)
Write-down of short-term securities—available-for-sale	—	—	17,001
Impairment charge on real estate owned	109	393	1,445
Stock-based compensation	2,454	2,540	28,320
Conversion of interest accrued to common stock	—	—	8
Acquired in-process research and development	—	—	29,461
Increase (decrease) on warrant valuation	(25,579)	5,509	(17,527)
(Increase) decrease in:			
Accounts receivable, other current assets and other assets	(1,356)	(3,297)	(5,467)
Net increase in accounts payable, accrued employee compensation, and other liabilities	6,325	4,740	12,460
Net cash used in operating activities	(18,031)	(13,321)	(224,566)
Cash flows from investing activities:			
Purchase of property and equipment	(973)	(628)	(19,674)
Patent costs	(548)	(821)	(8,913)
Purchase of marketable securities	—	(5)	(112,993)
Sale of marketable securities	—	—	117,724
Acquisition costs	—	—	(2,389)
Net cash used in investing activities	(1,521)	(1,454)	(26,245)
Cash flows from financing activities:			
Proceeds from sale of common stock, warrants, and partnership units, net of offering costs, and exercise of options and warrants	32,380	2,525	297,878
Repayments of long-term debt	(61)	(58)	(325)
Buyback of common stock pursuant to rescission offering	—	—	(289)
Withdrawal of partnership net assets	—	—	(177)
Issuance of convertible debt	—	—	80
Net cash provided by financing activities	32,319	2,467	297,167
Increase (decrease) in cash and cash equivalents	12,767	(12,308)	46,356
Cash and cash equivalents:			
Beginning of period	33,589	48,275	—
End of period	$ 46,356	$ 35,967	$ 46,356
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid during the year for interest	$ 68	$ 70	$ 467
SUPPLEMENTAL SCHEDULE OF NONCASH INVESTING ACTIVITIES AND FINANCING ACTIVITIES:			
Short-term securities—available-for-sale received in connection with the private offering	$ —	$ —	$ 17,897
Issuance of common stock and warrants in satisfaction of liabilities	$ 643	$ —	$ 1,188
Issuance of common stock for building purchase	$ —	$ —	$ 750
Assumption of long-term debt for building purchase	$ —	$ —	$ 2,200
Issuance of common stock for Ercole assets	$ —	$ —	$ 8,075
Assumption of liabilities for Ercole assets	$ —	$ —	$ 2,124

See accompanying notes to financial statements.

AVI BIOPHARMA, INC.
NOTES TO FINANCIAL STATEMENTS
(Unaudited)

Note 1. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements reflect the accounts of AVI BioPharma, Inc. (the "Company") and its consolidated subsidiaries. The accompanying unaudited condensed consolidated balance sheet data as of December 31, 2010 was derived from audited financial statements not included in this report. The accompanying unaudited condensed consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") and the rules and regulations of the U.S. Securities and Exchange Commission ("SEC") pertaining to interim financial statements. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements.

Management has determined that the Company operates in one segment: the development of pharmaceutical products on its own behalf or in collaboration with others.

The accompanying unaudited condensed consolidated financial statements reflect all adjustments that are, in the opinion of management, necessary for a fair presentation of the financial position, results of operations and cash flows for the interim periods. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the financial statements and the notes thereto included in the Company's annual report on Form 10-K for the year ended December 31, 2010. The results of operations for the interim periods presented are not necessarily indicative of the results to be expected for the full year.

Reclassifications

Certain prior year amounts have been reclassified to conform to current year presentation. These changes did not have a significant impact on the Company's net loss, assets, liabilities, shareholders' equity (deficit) or cash flows.

Estimates and Uncertainties

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

Commitments and Contingencies

As of the date of this report, the Company is not a party to any material legal proceedings with respect to itself, its subsidiaries, or any of its material properties. In the normal course of business, the Company may from time to time be named as a party to various legal claims, actions and complaints, including matters involving employment, intellectual property, effects from the use of therapeutics utilizing its technology, professional services or others. It is impossible to predict with certainty whether any resulting liability would have a material adverse effect on the Company's financial position, results of operations or cash flows.

Note 2. Fair Value Measurements

The Company measures at fair value certain financial assets and liabilities in accordance with a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. There are three levels of inputs that may be used to measure fair-value:

- Level 1 — quoted prices for identical instruments in active markets;
- Level 2 — quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets; and
- Level 3 — valuations derived from valuation techniques in which one or more significant value drivers are unobservable.

The Company's assets and liabilities measured at fair value on a recurring basis consisted of the following as of the date indicated:

	Fair Value Measurement as of September 30, 2011			
	Total	Level 1	Level 2	Level 3
		(in thousands)		
Cash and Cash equivalents	$46,356	$46,356	$—	$ —
Total assets	$46,356	$46,356	$—	$ —

	Fair Value Measurement as of September 30, 2011			
	Total	Level 1	Level 2	Level 3
		(in thousands)		
Warrants	$12,889	$ —	$—	$12,889
Total liabilities	$12,889	$ —	$—	$12,889

	Fair Value Measurement as of December 31, 2010			
	Total	Level 1	Level 2	Level 3
		(in thousands)		
Cash and Cash equivalents	$33,589	$33,589	$—	$ —
Total assets	$33,589	$33,589	$—	$ —

	Fair Value Measurement as of December 31, 2010			
	Total	Level 1	Level 2	Level 3
		(in thousands)		
Warrants	$39,111	$ —	$—	$39,111
Total liabilities	$39,111	$ —	$—	$39,111

A reconciliation of the change in value of the Company's warrants for the three months ended September 30, 2011 is as follows:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)
	(in thousands)
Balance at June 30, 2011	$ 19,941
Change in value of warrants	(7,052)
Balance at September 30, 2011	$ 12,889

A reconciliation of the change in value of the Company's warrants for the nine months ended September 30, 2011 is as follows:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)
	(in thousands)
Balance at December 31, 2010	$ 39,111
Change in value of warrants	(25,579)
Reclassification to shareholders' equity upon exercise of warrants	(643)
Balance at September 30, 2011	$ 12,889

See Note 7 — "Warrants" for additional information related to the determination of fair value of the warrants.

The carrying amounts reported in the balance sheets for accounts receivable, accounts payable, and other current monetary assets and liabilities approximate fair value because of the immediate or short-term maturity of these financial instruments.

Note 3. Accounts Receivable

Accounts receivable are stated at invoiced amount and do not bear interest. Because all accounts receivable are from the U.S. government and historically no amounts have been written off, an allowance for doubtful accounts receivable is not considered necessary. The accounts receivable balance included $2.2 million and $3.2 million of U.S. government receivables that were unbilled at September 30, 2011 and December 31, 2010, respectively.

Note 4. Property Held for Sale

In 2009, the Company listed for sale the industrial property located in Corvallis, Oregon and recorded a $0.1 million impairment charge to reduce carrying value to fair value less estimated costs to sell. The Company recorded in general and administrative expenses additional impairment charges of $0.1 million and $0.4 million during the three months ending September 30, 2011 and 2010, respectively, to reduce its carrying value to the current appraised value. The Company has used a Level 3 fair value measure with the use of an independent appraisal to estimate the value of this property.

Note 5. U.S. Government Contracts

In the periods presented, substantially all of the revenue generated by the Company was derived from research contracts with the U.S. government. The Company recognizes revenues from U.S. government research contracts during the period in which the related expenditures are incurred and presents these revenues and related expenses gross in the consolidated financial statements. As of September 30, 2011, the Company had contracts with the U.S. government pursuant to which it is entitled to receive up to an aggregate of $198.5 million for development of its product candidates, of which $109.5 million had been billed or recognized as revenue and $89.0 million of which relates to development that has not yet been completed and has not been billed. The Company is potentially eligible for up to an additional $161.5 million if the U.S. government exercises its options for the Company to conduct additional activities under such contracts. The following is a description of such contracts.

January 2006 Agreements (Ebola and Marburg Host Factors, Dengue, Anthrax and Ricin)

In January 2006, the final version of the 2006 defense appropriations act was enacted, which act included an allocation of $11.0 million to fund the Company's ongoing defense-related programs under four different contracts, all of which were executed in 2007, and the last of which expired in October 2010. Net of government administrative costs, it was anticipated that the Company would receive up to $9.8 million under this allocation. The Company's technology is expected to be used to continue developing RNA-based drugs against Ebola and Marburg viruses. As of September 30, 2011, the Company had recognized revenue of $9.7 million with respect to these contracts and the Company does not expect to receive any additional significant funds under these contracts.

November 2006 Agreement (Ebola, Marburg and Junín Viruses)

In November 2006, the Company entered into a two-year research contract with the U.S. Defense Threat Reduction Agency ("DTRA") pursuant to which the Company was entitled to $28.0 million to fund development of the Company's antisense therapeutic candidates for Ebola, Marburg and Junín hemorrhagic viruses. In May 2009, this contract was amended to extend the term of the contract until November 2009 and to increase funding by $5.9 million to an aggregate of $33.9 million. In September 2009, the contract was amended again to extend the term of the contract to February 2011 and to increase funding by an additional $11.5 million to an aggregate of $45.4 million. In November 2010, the Company and DTRA agreed that the key activities under this contract had been completed and that further activities under this contract would cease and this contract would be deemed concluded. As of September 30, 2011, the Company had recognized revenue of $38.4 million with respect to this contract and the Company does not expect further significant revenue.

May 2009 Agreement (H1N1/Influenza)

In May 2009, the Company entered into a contract with DTRA to develop swine flu drugs. Under this contract, the Company was entitled to receive up to $4.1 million for work involving the application of the Company's proprietary PMO and PMO *plus*® antisense chemistry. The Company used the funds from this contract to conduct preclinical development activities, including animal testing. In March 2010, the contract was amended to include testing against additional influenza strains including H5N1 (avian flu), Tamiflu®-resistant H1N1 (swine flu) and H3N2 (seasonal flu) and funding increased by $4.0 million to an aggregate of $8.1 million. As of September 30, 2011, the Company had recognized revenue of $7.0 million with respect to this contract and does not expect to receive additional significant revenue.

June 2010 Agreement (H1N1/Influenza)

On June 4, 2010, the Company entered into a contract with DTRA to advance the development of AVI-7100, which was previously designated AVI-7367 and which has been renumbered by the Company, as a medical countermeasure against the pandemic H1N1 influenza virus in cooperation with the Transformational Medical Technologies program ("TMT") of the U.S. Department of

Defense ("DoD"). The contract originally provided for funding of up to $18.0 million (which was reduced to $17.7 million in March 2011 when the contract was definitized) to advance the development of AVI-7100, including studies enabling an Investigational New Drug ("IND") application with the U.S. Food and Drug Administration ("FDA"), the development of an intranasal delivery formulation, and the funding of the entry into a Phase I clinical trial to obtain human safety data to support potential use under an Emergency Use Authorization. In April 2011, the contract was amended to remove clinical studies from the scope of work and to add *in vitro* broad spectrum strain investigation, additional formulation work related to intranasal delivery and an intravenous compatibility study. As a result of this amendment, the amount of funding under the contract decreased to an aggregate of $13.1 million. The period of performance for this contract ended on June 3, 2011 and as of September 30, 2011, the Company had recognized revenue of $12.2 million with respect to this contract and does not expect to receive additional significant revenue.

July 2010 Agreement (Ebola and Marburg)

On July 14, 2010, the Company was awarded a new contract with the DoD Chemical and Biological Defense Program through the U.S. Army Space and Missile Defense Command for the advanced development of the Company's hemorrhagic fever virus therapeutic candidates, AVI-6002 and AVI-6003, for Ebola and Marburg viruses, respectively. The contract is funded as part of the TMT program, which was established to develop innovative platform-based solutions countering biological threats. The contract is structured into four segments for each therapeutic candidate and has an aggregate period of performance spanning approximately six years if DoD exercises its options for all segments. Activity under the first segment began in July 2010 and includes Phase I studies in healthy volunteers as well as preclinical studies. In September 2011, the contract was amended to shift activities originally scheduled to occur during the second segment for each therapeutic candidate to the current funding period, which was extended by approximately 13 months to the second quarter of 2013. These activities include non-human primate studies to evaluate the typical viral time course of infection and the optimal doses, timing and pharmacokinetics and pharmacodynamics of each therapeutic candidate, as well as human safety studies of multiple ascending doses of AVI-6002 and AVI-6003. As a result of the amendment, the aggregate available funding for the current segments is approximately $126.5 million of which $39.6 million has been recognized to date.

After completion of the first segment, and each successive segment, DoD has the option to proceed to the next segment for either or both AVI-6002 and AVI-6003. If DoD exercises its options for all four segments, contract activities would include all clinical and licensure activities necessary to obtain FDA regulatory approval of each therapeutic candidate which could include aggregate potential funding up to approximately $288.0 million over six years, of which $161.5 million remains to be funded.

The following table sets forth the revenue for each of the contracts with the U.S. government for the three and nine months ended September 30, 2011 and 2010.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2011	2010	2011	2010
	(in thousands)		(in thousands)	
January 2006 Agreements *(Ebola and Marburg host factor, Dengue, Anthrax and Ricin)*	$ 9	$ 88	$ 9	$ 556
November 2006 Agreement *(Ebola, Marburg and Junín Viruses)*	—	345	—	2,953
May 2009 Agreement *(H1N1)*	—	1,358	134	2,802
June 2010 Agreement *(H1N1)*	183	4,201	3,390	4,634
July 2010 Agreement *(Ebola and Marburg)*	7,290	2,716	29,780	2,716
Other Agreements	42	(6)	92	242
Total	$7,524	$ 8,702	$ 33,405	$13,903

Note 6. Stock Compensation

Stock Options

The Company previously sponsored a 2002 Equity Incentive Plan (the "2002 Plan") pursuant to which it issued options to purchase its common stock to the Company's employees, directors and service providers. In June 2011, the 2002 Plan was replaced by the 2011 Equity Incentive Plan (the "2011 Plan" and, together with the 2002 Plan, the "Plans") following approval by the Company's shareholders. There will be no further grants under the 2002 Plan, but awards previously granted pursuant to the 2002 Plan will continue to be governed by its terms. The 2011 Plan allows for the grant of stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance shares and performance units.

In general, stock options granted under the 2002 Plan prior to December 31, 2010 vest over a three year period, with one-third of the underlying shares vesting on each anniversary of grant, and have a ten year term. Beginning in January 2011, stock options granted under the 2002 Plan vest over a four year period, with one-fourth of the underlying shares vesting on the first anniversary of the grant and 1/48 th of the underlying shares vesting monthly thereafter, such that the underlying shares will be fully vested on the fourth anniversary of the grant. As of September 30, 2011, no shares of common stock remain available for future grant under the 2002 Plan.

In general, stock options granted under the 2011 Plan vest over a four year period, with one-fourth of the underlying shares vesting on the first anniversary of the grant and 1/48th of the underlying shares vesting monthly thereafter, such that the underlying shares will be fully vested on the fourth anniversary of the grant. The maximum aggregate number of shares that may be issued under the 2011 Plan is 15,072,457, including 2,072,457 shares reserved but not issued under the 2002 Plan. In addition, shares subject to outstanding awards under the 2002 Plan that expire or otherwise terminate without having been exercised in full, or are forfeited to or repurchased by the Company, will be available for issuance under the 2011 Plan, up to a maximum of 11,086,073 shares. As of September 30, 2011, 11,213,246 shares of common stock remain available for future grant under the 2011 Plan.

A summary of the Company's stock option activity with respect to the nine months ended September 30, 2011 follows:

Stock Options	Underlying Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2010	8,490,055	$ 2.14		
Granted	8,577,250	1.62		
Exercised	(151,743)	1.09		
Canceled or expired	(1,338,413)	2.25		
Outstanding at September 30, 2011	15,577,149	$ 1.85	7.33	$184,000
Vested at September 30, 2011 and expected to vest	14,873,507	$ 1.87	7.21	$183,000
Exercisable at September 30, 2011	5,611,896	$ 2.31	3.58	$120,000

The weighted-average fair value per share of stock-based awards, including stock options and restricted stock grants, granted to employees during the three months ended September 30, 2011 and 2010 was $0.79 and $1.36, respectively, and during the nine months ended September 30, 2011 and 2010 was $1.09 and $1.10, respectively. During the nine months ended September 30, 2011 and 2010, the total intrinsic value of stock options exercised was $82,000 and $955,000 respectively, and the total grant date fair value of stock options that vested was $2,300,000 and $2,555,000, respectively.

Valuation Assumptions

Stock-based compensation costs are based on the fair value calculated from the Black-Scholes option-pricing model on the date of grant for stock options. The fair value of stock grants is amortized as compensation expense on a straight-line basis over the vesting period of the grants.

The fair values of stock options granted during the periods presented were measured on the date of grant using the Black-Scholes option-pricing model, with the following assumptions:

	Three and Nine Months Ended September 30,	
	2011	2010
Risk-free interest rate	1.1%-2.4%	1.4%-2.4%
Expected dividend yield	0%	0%
Expected lives	5.4-5.5 years	5.3-5.5 years
Expected volatility	78.2%-81.6%	83.3%-85.2%

The risk-free interest rate is estimated using an average of treasury bill interest rates at the time of grant that correlate to the prevailing interest rates for a period commensurate with the expected life. The expected dividend yield is zero as the Company has not paid any dividends to date and does not expect to pay dividends in the future. The expected lives are estimated using expected and historical exercise behavior. The expected volatility is estimated using historical calculated volatility of the Company's common stock over a period commensurate with the expected life. The amounts estimated according to the Black-Scholes option pricing model may not be indicative of the actual values realized upon the exercise of these options by the holders.

The Company is required to estimate potential forfeiture of stock grants and adjust compensation cost recorded accordingly. The estimate of forfeitures is adjusted over the requisite service period to the extent that actual forfeitures differ, or are expected to differ, from such estimates. Changes in estimated forfeitures are recognized through a cumulative catch-up in the period of change and impact the amount of stock compensation expense to be recognized in future periods.

Stock-based Compensation Expense

The amount of stock-based compensation expense recognized in the three months ended September 30, 2011 and 2010 was $592,000 and $509,000, respectively. For the nine months ended September 30, 2011 and 2010, stock-based compensation expense recognized was $2,454,000 and $2,540,000, respectively. A summary of the stock-based compensation expense recognized in the statements of operations is as follows:

	Three Months Ended		Nine Months Ended	
	September 30, 2011	September 30, 2010	September 30, 2011	September 30, 2010
	(in thousands)		(in thousands)	
Research and development	$ 266	$ 250	$ 998	$ 665
General and administrative	326	259	1,456	1,875
Total	$ 592	$ 509	$ 2,454	$ 2,540

As of September 30, 2011, there was $9.2 million of total unrecognized compensation cost related to non-vested share-based compensation arrangements granted, including stock options and restricted stock. These costs are expected to be recognized over a weighted-average period of 3.2 years.

During the nine months ended September 30, 2011, in connection with their appointments as officers of the Company, Ms. Effie Toshav, Dr. Peter Linsley and Dr. Edward Kaye were granted options to purchase 650,000, 800,000 and 850,000 shares, respectively, of the Company's common stock at exercise prices of $2.58, $1.76, and $1.38, respectively. These options were granted outside of the Plans and have vesting schedules consistent with the customary schedule under the 2011 Plan. The shares underlying these options are included in the summary stock compensation table noted above in this Note 6.

Paul Medeiros, the Company's former Senior Vice President of Business Development and Chief Business Officer, ceased to be an employee of the Company effective June 1, 2011. Pursuant to the terms of his employment agreement and a separation and release agreement that the Company entered into with Mr. Medeiros in connection with the termination of his employment, Mr. Medeiros received 12 months of his base compensation in a lump sum (an amount equal to $321,300) and all of his unvested stock options vested on June 1, 2011 and will be exercisable for a period of 180 days following June 1, 2011. During the nine months ending September 30, 2011, the Company paid his cash severance and recorded a charge of $288,000 for the stock compensation expense.

Dr. Stephen Shrewsbury, the Company's former Senior Vice President and Chief Medical Officer, ceased to be an employee of the Company effective August 1, 2011. Pursuant to the terms of his employment agreement and a separation and release agreement that the Company entered into with Dr. Shrewsbury in connection with the termination of his employment, Dr. Shrewsbury received 12 months of his base compensation in a lump sum (an amount equal to $319,300) and all of his unvested stock options vested on August 1, 2011 and will be exercisable for a period of 180 days following August 1, 2011. During the nine months ending September 30, 2011, the Company paid his cash severance and recorded a charge of $288,000 for the stock compensation expense.

J. David Boyle II, the Company's former Senior Vice President and Chief Financial Officer, ceased to be an employee of the Company effective July 24, 2011, the expiration date of his employment agreement. Pursuant to the terms of a separation agreement and release that the Company entered into with Mr. Boyle in connection with his separation from employment, Mr. Boyle received a lump sum payment equal to $113,507, the vesting of 116,666 shares subject to Mr. Boyle's August 2008 option grant was accelerated and the post-separation exercise period for options to purchase up to 593,333 shares of the Company's common stock was extended until December 30, 2011. During the nine months ending September 30, 2011, the Company paid his cash severance and recorded a decrease of $25,000 for the stock compensation expense.

Note 7. Warrants

Warrants issued in connection with the Company's December 2007, January 2009, and August 2009 financings are classified as liabilities due to their settlement terms. These warrants are non-cash liabilities; the Company is not required to expend any cash to settle these liabilities.

The fair value of these warrants was recorded on the balance sheet at issuance and the warrants are marked to market at each financial reporting period, with changes in the fair value recorded as a gain or loss in the statement of operations. The fair value of the warrants is determined using the Black-Scholes option-pricing model, which requires the use of significant judgment and estimates for the inputs used in the model. The following reflects the weighted-average assumptions for each of the periods indicated:

	Three and Nine Months Ended September 30,	
	2011	2010
Risk-free interest rate	0.1%-1.3%	0.1%-2.6 %
Expected dividend yield	0%	0%
Expected lives	1.2-3.4 years	0.1-4.4 years
Expected volatility	55.3%-88.5 %	62.3%-96.7 %
Shares underlying warrants classified as liabilities	28,948,962	29,409,546
Market value of stock at beginning of year	$ 2.12	$ 1.58
Market value of stock at end of period	$ 1.12	$ 1.83

The risk-free interest rate is estimated using an average of treasury bill interest rates at the valuation date that correlate to the prevailing interest rates over a period commensurate with the expected lives. The expected dividend yield is zero as the Company has not paid any dividends to date and does not expect to pay dividends in the future. The expected lives are based on the remaining contractual lives of the related warrants at the valuation date. The expected volatility is estimated using historical volatility of the Company's common stock, taking into account factors such as future events or circumstances that could impact volatility over a period commensurate with the expected lives. The amounts estimated according to the Black-Scholes option pricing model may not be indicative of the actual values realized upon the exercise of these warrants by the holders.

The Company also has warrants that are classified as permanent equity; the fair value of the warrants was recorded as additional paid-in capital at the time of issuance and no further adjustments are required. 255,895 shares were underlying such warrants for each of the three and nine months ended September 30, 2011 and 2010.

A summary of the Company's warrant activity with respect to the nine months ended September 30, 2011 is as follows:

Warrants	Shares	Weighted Average Exercisable Price	Weighted Average Remaining Contractual Term
Outstanding at December 31, 2010	29,665,441	$ 1.58	
Granted	—	—	
Exercised	(460,584)	$ 1.39	
Canceled or expired	—	—	
Outstanding at September 30, 2011	29,204,857	$ 1.59	2.6

Note 8. Earnings Per Share

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding. Diluted net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of common shares and dilutive common stock equivalent shares outstanding.

	Three Months Ended September 30,	
	2011	2010
	(in thousands, except per share data)	
Net loss	$ (4,020)	$ (7,293)
Weighted-average number of shares of common stock and common stock equivalents outstanding:		
Weighted-average number of common shares outstanding for computing basic earnings per share	135,738	111,767
Dilutive effect of warrants and stock options after application of the treasury stock method	*	*
Weighted-average number of common shares outstanding for computing diluted earnings per share	135,738	111,767
Net loss per share—basic and diluted	$ (0.03)	$ (0.07)

	Nine Months Ended September 30,	
	2011	2010
	(in thousands, except per share data)	
Net loss	$ (908)	$ (24,533)
Weighted-average number of shares of common stock and common stock equivalents outstanding:		
Weighted-average number of common shares outstanding for computing basic earnings per share	127,523	110,863
Dilutive effect of warrants and stock options after application of the treasury stock method	*	*
Weighted-average number of common shares outstanding for computing diluted earnings per share	127,523	110,863
Net loss per share—basic and dilutive	$ (0.01)	$ (0.22)

* Warrants and stock options to purchase 44,782,006 and 38,070,498 shares of common stock as of September 30, 2011 and 2010, respectively, were excluded from the net loss per share calculation as their effect would have been anti-dilutive.

Note 9. Liquidity

Since its inception in 1980 through September 30, 2011 the Company has incurred losses of approximately $308.6 million, substantially all of which resulted from expenditures related to research and development, general and administrative charges and acquired in-process research and development resulting from two acquisitions. The Company has not generated any material revenue from product sales to date, and there can be no assurance that revenue from product sales will be achieved. The Company expects to incur operating losses over the next several years.

At September 30, 2011, cash and cash equivalents were $46.4 million, compared to $33.6 million at December 31, 2010. The Company's principal sources of liquidity have been equity financings and revenue from its U.S. government research contracts. The Company's principal uses of cash have been research and development expenses, general and administrative expenses and other working capital requirements.

In the periods presented, substantially all of the revenue generated by the Company was derived from research contracts with the U.S. government. As of September 30, 2011, the Company had ongoing contracts with the U.S. government pursuant to which it is entitled to receive up to an aggregate of $126.5 million for development of its product candidates, of which $39.6 million had been recognized as revenue and $86.9 million relates to development that has not yet been completed and has not been billed or recognized as revenue. Additionally, the Company is potentially eligible for an amount up to approximately $161.5 million of the potential aggregate total award of $288.0 million if the U.S. government exercises all its options on the July 2010 Ebola and Marburg agreement. See Note 5 — "U.S. Government Contracts" for additional information.

In January and August 2009, the Company sold shares of its common stock and also issued warrants to purchase shares of its common stock in offerings registered under the Securities Act of 1933 (the "Securities Act"). In April 2011, the Company sold 23.0 million shares of its common stock at the price of $1.50 per share in an offering registered under the Securities Act. The offering generated gross proceeds of $34.5 million. See Note 10 — "Equity Financings" for more information.

Note 10. Equity Financings

In December 2007, the Company closed a private equity financing for net proceeds of $14.4 million with several institutional investors. In the private equity financing, the Company sold units consisting of one share of common stock and a warrant to purchase one-half of a share of common stock for $1.90 per unit. A total of 10.7 million shares of common stock and warrants for the purchase of 5.3 million shares of common stock at $2.45 per share were sold. These warrants are currently exercisable and expire on December 19, 2012.

In January 2009, the Company sold approximately 14.2 million shares of its common stock and also issued warrants to purchase approximately 14.2 million shares of its common stock in an offering registered under the Securities Act. The offering generated net proceeds of approximately $15.5 million. The warrants issued to the investors in the offering have an exercise price of $1.16 per share and are exercisable at any time on or before July 30, 2014. In connection with the offering, the Company also issued to the placement agent a warrant to purchase approximately 427,000 shares of the Company's common stock at an exercise price of $1.45 per share. The warrant issued to the placement agent is exercisable on or before January 30, 2014.

In August 2009, the Company sold approximately 24.3 million shares of its common stock and also issued warrants to purchase approximately 9.7 million shares of its common stock in an offering registered under the Securities Act. The offering generated net proceeds of approximately $32.3 million. The warrants issued to the investors in the offering have an exercise price of $1.78 per share and are exercisable at any time on or before August 25, 2014.

The warrants issued in connection with the January and August 2009 offerings, as well as the warrants issued in the December 2007 financing, are classified as a liability due to their settlement terms. Accordingly, the fair value of the warrants is recorded on the consolidated balance sheet as a liability, and such fair value is adjusted at each financial reporting period with the adjustment to fair value reflected in the consolidated statement of operations as described in greater detail in Note 7 — "Warrants." These warrants are non-cash liabilities; the Company is not required to expend any cash to settle these liabilities.

In April 2011, the Company sold 23.0 million shares of its common stock at the price of $1.50 per share in an offering registered under the Securities Act. The offering generated gross proceeds of $34.5 million.

Note 11. Income Taxes

The Company has not recognized any liability for unrecognized tax benefits. There are no unrecognized tax benefits included in the balance sheet that would, if recognized, affect the effective tax rate.

The Company's policy is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company had no accrual for interest or penalties on its balance sheet at September 30, 2011 or December 31, 2010, and has not recognized interest and/or penalties in the statement of operations for the three and nine months ended September 30, 2011.

At December 31, 2010, the Company had net deferred tax assets of approximately $109 million. The deferred tax assets are primarily composed of U.S. federal and state tax net operating loss carryforwards, U.S. federal and state research and development credit carryforwards, share-based compensation expense and intangibles. Due to uncertainties surrounding its ability to generate future taxable income to realize these assets, a full valuation allowance has been established to offset its net deferred tax asset. Additionally, the Internal Revenue Code rules could limit the future use of its net operating loss and research and development credit carryforwards to offset future taxable income based on ownership changes and the value of the Company's stock.

Note 12. Recent Accounting Pronouncements

In January 2010, the Financial Accounting Standards Board ("FASB"), issued guidance to amend the disclosure requirements related to recurring and nonrecurring fair value measurements. Other than requiring additional disclosures, adoption of this new guidance did not have a material impact on the Company's financial statements.

In April 2010, the FASB issued guidance on applying the milestone method of revenue recognition for milestone payments for achieving specific performance measures when those payments are related to uncertain future events. The guidance is effective on a prospective basis to milestones achieved in fiscal years, and interim periods within those years, beginning January 1, 2011. The adoption of this new guidance did not have a material impact on the Company's financial statements.

In April 2011, the FASB issued guidance to achieve common fair value measurement and disclosure requirements between GAAP and International Financial Reporting Standards. This guidance amends current fair value measurement and disclosure guidance to include increased transparency around valuation inputs and investment categorization. The guidance is effective for fiscal years and interim periods beginning after December 15, 2011. The Company does not believe its adoption of this new guidance in the first quarter of 2012 will have a material impact on its financial statements.

In June 2011, the FASB issued guidance regarding presentation of other comprehensive income in the financial statements. This guidance will eliminate the option under GAAP to present other comprehensive income in the statement of changes in equity. Under the guidance, the Company will have the option to present the components of net income and comprehensive income in either one or two consecutive financial statements. The guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. The adoption of this new guidance is not expected to have a material impact on the Company's financial statements.

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

This section should be read in conjunction with our condensed consolidated financial statements and related notes included in Part I, Item 1 of this Quarterly Report on Form 10-Q and the section contained in our Annual Report on Form 10-K for the year ended December 31, 2010 under the caption "Part II-Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations". This discussion contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Exchange Act. All statements other than historical or current facts, including, without limitation, statements about our business strategy, plans and objectives of management, and our future prospects, are forward-looking statements and are sometimes identified by such words as "believe," "expect," "anticipate," "may," "will," "should," "could," "would," "plan," "estimate," "project," "predict," and "potential," and words of similar import. These forward-looking statements include, but are not limited to, statements regarding:

- *our expectations regarding our ability to become a leading developer and marketer of RNA-based therapeutics;*
- *the efficacy, potency and utility of our product candidates in the treatment of rare and infectious diseases, and their potential to treat a broad number of human diseases;*
- *our expectations regarding the development and clinical benefits of our product candidates;*
- *our ability to initiate a pivotal Phase III clinical trial for eteplirsen in the second half of 2012;*
- *the receipt of any required approval from the U.S. Food and Drug Administration, or FDA, or other regulatory approval for our products;*
- *the effect of regulation by FDA and other agencies;*
- *our ability to invalidate some or all of the claims covered by patents issued to competitors;*
- *the extent of protection that our patents provide and our pending patent applications may provide, if patents issue from such applications, to our technologies and programs;*
- *the impact of competitive products, product development, commercialization and technological difficulties;*
- *acceptance of our products, if introduced, in the marketplace;*
- *our expectations about funding from the government and other sources;*
- *our estimates regarding our future revenues, research and development expenses, other expenses, payments to third parties and growth in staffing levels; and*
- *our estimates regarding how long our existing cash and cash equivalents, exclusive of receipt of future proceeds pursuant to our contracts with the U.S. government, will be sufficient to finance our operations and statements about our future capital needs.*

These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in this Quarterly Report in Part II, Item 1A – "Risk Factors," and elsewhere in this Quarterly Report. These statements, like all statements in this Quarterly Report, speak only as of their date, and we undertake no obligation to update or revise these statements in light of future developments. In this report, "we," "our," "us," "AVI," and "Company" refers to AVI BioPharma, Inc.

Overview

We are a biopharmaceutical company focused on the discovery and development of unique RNA-based therapeutics for the treatment of both rare and infectious diseases. Applying our proprietary, highly-differentiated and innovative platform technologies, we are able to target a broad range of diseases and disorders through distinct RNA-based mechanisms of action. We are primarily focused on rapidly advancing the development of our potentially disease-modifying Duchenne muscular dystrophy drug candidates with the intent to realize the product opportunities of such candidates and provide significant clinical benefits. We are also focused on developing therapeutics for the treatment of infectious diseases. By building on the research under our infectious disease programs funded by the U.S. government and leveraging our highly-differentiated, proprietary technology platforms, we are seeking to further develop our research and development competencies and capabilities and identify additional product candidates. We believe that our organizational capabilities will enable us to achieve these goals and become a leading developer and marketer of RNA-based therapeutics for the treatment of both rare and infectious diseases.

Our highly-differentiated RNA-based technologies work at the most fundamental level of biology and potentially could have a meaningful impact across a broad range of human diseases and disorders. Our lead program focuses on the development of disease modifying therapeutic candidates for Duchenne muscular dystrophy, or DMD, a rare genetic muscle wasting disease caused by the absence of dystrophin, a protein necessary for muscle function. Eteplirsen (the non-proprietary name assigned to AVI-4658) is our lead therapeutic candidate for DMD and is intended to target a substantial group of individuals with DMD. If we are successful in our

development efforts, eteplirsen will address a severe unmet medical need. Data from 17 of the 19 individuals enrolled in our Phase Ib/II trial in the United Kingdom and treated systemically with eteplirsen demonstrated some generation of novel dystrophin, and one participant exhibited the first ever reported increase in dystrophin positive muscle fibers to greater than 50% of normal. Restoration of dystrophin expression and dystrophin positive fibers is believed to be critical for successful disease modifying treatment of individuals with DMD. We initiated a Phase II trial for eteplirsen in August 2011 with an objective of entering a pivotal trial in the second half of 2012.

We are also leveraging the capabilities of our RNA-based technology platforms to develop therapeutics for the treatment of infectious diseases. The U.S. Department of Defense, or DoD, has provided significant financial support for the development of therapeutics against Ebola, Marburg, Dengue and influenza viruses, as described in greater detail below.

We employ our highly-differentiated and innovative RNA-based technology platforms in both our DMD and infectious disease programs. The basis for our novel RNA-based therapeutics is our phosphorodiamidate-linked morpholino oligomer, or PMO, chemistries. By applying our technologies, we are able to target a broad range of diseases and disorders through distinct RNA-based mechanisms of action. Unlike other RNA-based therapeutics, our technologies can be used to selectively up-regulate or down-regulate the production of a target protein, or direct the expression of novel proteins involved in human diseases and disorders. We believe that these broad capabilities represent highly competitive RNA-based technology platforms and a strong intellectual property position, which we are leveraging to identify additional product candidates and explore various strategic opportunities. As of September 30, 2011, we owned or controlled approximately 258 U.S. and corresponding foreign patents and 190 U.S. and corresponding foreign patent applications.

From our inception in 1980, we have devoted our resources primarily to fund our research and development efforts. We have been unprofitable since inception and, other than government research contracts, limited interest, license fees, and grants, we have had no material revenue. We expect to continue to incur losses for the foreseeable future as we continue our research and development efforts and seek to enter additional collaborative efforts. As of September 30, 2011, our accumulated deficit was $308.6 million.

Government Contracts

In the periods presented, substantially all of the revenue generated by our company was derived from research contracts with the U.S. government. We recognize revenues from U.S. government research contracts during the period in which the related expenditures are incurred and present these revenues and related expenses gross in the consolidated financial statements. As of September 30, 2011, we had contracts with the U.S. government pursuant to which we are entitled to receive up to an aggregate of $198.5 million for development of our product candidates, of which $109.5 million had been billed or recognized as revenue and $89.0 million of which relates to development that has not yet been completed and has not been billed. We are potentially eligible for up to approximately $161.5 million if the U.S. government exercises its options for the Company to conduct additional activities under such contracts. The following is a description of such contracts.

January 2006 Agreements (Ebola and Marburg Host Factors, Dengue, Anthrax and Ricin)

In January 2006, the final version of the 2006 defense appropriations act was enacted, which act included an allocation of $11.0 million to fund our ongoing defense-related programs under four different contracts, all of which were executed in 2007, and the last of which expired in October 2010. Net of government administrative costs, it was anticipated that we would receive up to $9.8 million under this allocation. Our technology is expected to be used to continue developing RNA-based drugs against Ebola and Marburg viruses. As of September 30, 2011, we had recognized revenue of $9.7 million with respect to these contracts and do not expect to receive any additional significant funds under these contracts.

November 2006 Agreement (Ebola, Marburg and Junín Viruses)

In November 2006, we entered into a two-year research contract with the U.S. Defense Threat Reduction Agency, or DTRA, pursuant to which we were entitled to $28.0 million to fund development of our antisense therapeutic candidates for Ebola, Marburg and Junín hemorrhagic viruses. In May 2009, this contract was amended to extend the term of the contract until November 2009 and to increase funding by $5.9 million to an aggregate of $33.9 million. In September 2009, the contract was amended again to extend the term of the contract to February 2011 and to increase funding by an additional $11.5 million to an aggregate of $45.4 million. In November 2010, we and DTRA agreed that the key activities under this contract had been completed and that further activities under this contract would cease and this contract would be deemed concluded. As of September 30, 2011, we had recognized revenue of $38.4 million with respect to this contract and do not expect further significant revenue.

May 2009 Agreement (H1N1/Influenza)

In May 2009, we entered into a contract with DTRA to develop swine flu drugs. Under this contract, we were entitled to receive up to $4.1 million for work involving the application of our proprietary PMO and PMOplus ® antisense chemistry. We used the funds from this contract to conduct preclinical development activities, including animal testing. In March 2010, the contract was amended to include testing against additional influenza strains including H5N1 (avian flu), Tamiflu®-resistant H1N1 (swine flu) and H3N2 (seasonal flu) and funding increased by $4.0 million to an aggregate of $8.1 million. As of September 30, 2011, we had recognized revenue of $7.0 million with respect to this contract and do not expect to receive additional significant revenue.

June 2010 Agreement (H1N1/Influenza)

On June 4, 2010, we entered into a contract with DTRA to advance the development of AVI-7100, which was previously designated AVI-7367 and which has been renumbered by us, as a medical countermeasure against the pandemic H1N1 influenza virus in cooperation with the Transformational Medical Technologies program, or TMT, of the U.S. Department of Defense, or DoD. The contract originally provided for funding of up to $18.0 million (which was reduced to $17.7 million in March 2011 when the contract was definitized) to advance the development of AVI-7100, including studies enabling an Investigational New Drug, or IND, application with the U.S. Food and Drug Administration, or FDA, the development of an intranasal delivery formulation, and the funding of the entry into a Phase I clinical trial to obtain human safety data to support potential use under an Emergency Use Authorization. In April 2011, the contract was amended to remove clinical studies from the scope of work and to add *in vitro* broad spectrum strain investigation, additional formulation work related to intranasal delivery and an intravenous compatibility study. As a result of this amendment, the amount of funding under the contract decreased to an aggregate of $13.1 million. The period of performance for this contract ended on June 3, 2011 and as of September 30, 2011, we had recognized revenue of $12.2 million with respect to this contract and do not expect to receive additional significant revenue.

July 2010 Agreement (Ebola and Marburg)

On July 14, 2010, we were awarded a new contract with the DoD Chemical and Biological Defense Program through the U.S. Army Space and Missile Defense Command for the advanced development of our hemorrhagic fever virus therapeutic candidates, AVI-6002 and AVI-6003, for Ebola and Marburg viruses, respectively. The contract is funded as part of the TMT program, which was established to develop innovative platform-based solutions countering biological threats. The contract is structured into four segments for each therapeutic candidate and has an aggregate period of performance spanning approximately six years if DoD exercises its options for all segments. Activity under the first segment began in July 2010 and includes Phase I studies in healthy volunteers as well as preclinical studies. In September 2011, the contract was amended to shift activities originally scheduled to occur during the second segment for each therapeutic candidate to the current funding period, which was extended by approximately 13 months to the second quarter of 2013. These activities include non-human primate studies to evaluate the typical viral time course of infection and the optimal doses, timing and pharmacokinetics and pharmacodynamics of each therapeutic candidate, as well as human safety studies of multiple ascending doses of AVI-6002 and AVI-6003. As a result of the amendment, the aggregate available funding for the current segments is approximately $126.5 million of which $39.6 million has been recognized to date.

After completion of the first segment, and each successive segment, DoD has the option to proceed to the next segment for either or both AVI-6002 and AVI-6003. If DoD exercises its options for all four segments, contract activities would include all clinical and licensure activities necessary to obtain FDA regulatory approval of each therapeutic candidate which could include aggregate potential funding up to $288.0 million over six years, of which $161.5 million remains to be funded.

The following table sets forth the revenue for each of the contracts with the U.S. government for the three and nine months ended September 30, 2011 and 2010.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2011	2010	2011	2010
	(in thousands)		(in thousands)	
January 2006 Agreements *(Ebola and Marburg host factor, Dengue, Anthrax and Ricin)*	$ 9	$ 88	$ 9	$ 556
November 2006 Agreement *(Ebola, Marburg and Junín Viruses)*	—	345	—	2,953
May 2009 Agreement *(H1N1)*	—	1,358	134	2,802
June 2010 Agreement *(H1N1)*	183	4,201	3,390	4,634
July 2010 Agreement (*Ebola and Marburg*)	7,290	2,716	29,780	2,716
Other Agreements	42	(6)	92	242
Total	$7,524	$ 8,702	$ 33,405	$13,903

Key Financial Metrics

Revenue

Government Research Contract Revenue. In the periods presented, we have generated substantially all of our revenue from U.S. government research contracts. We recognize revenue from U.S. government research contracts during the period in which the related expenditures are incurred and present such revenue and related expense gross in the consolidated financial statements.

We defer recognition of non-refundable upfront fees if we have continuing performance obligations without which the technology, right, product or service conveyed in conjunction with the non-refundable fee has no utility to the licensee that is separate and independent of our performance under the other elements of the arrangement. In addition, if we have continuing involvement through research and development services that are required because our know-how and expertise related to the technology is proprietary to us, or can only be performed by us, then such up-front fees are deferred and recognized over the period of continuing involvement. As of September 30, 2011, we had deferred revenue of $3.3 million, which represents up-front fees received from third parties pursuant to certain contractual arrangements and will be recognized as performance obligations are satisfied.

Substantially all of our revenue is derived from research contracts with the U.S. government. Government contract revenue is highly dependent on the timing of various activities performed by us and our third party vendors, in particular, with respect to our July 2010 Ebola and Marburg agreement. Changes in the timing of activities performed in support of this contract have, and may in the future, resulted in unexpected fluctuations in our revenue from period to period. For example, certain activities originally scheduled for the third and fourth quarters of 2011 were deferred pending finalization of the amendment to the July 2010 Ebola and Marburg Agreement in September 2011. As a result, the revenue associated with these activities was also deferred. We expect that future revenue under our government contracts will continue to be variable as a result of the foregoing factors.

Expenses

Research and Development. Research and development expense consists of costs associated with research activities as well as costs associated with our product development efforts, conducting preclinical studies, and clinical trial and manufacturing costs.

Direct research and development expenses associated with our programs include clinical trial site costs, clinical manufacturing costs, costs incurred for consultants and other outside services, such as data management and statistical analysis support, and materials and supplies used in support of the clinical programs. Indirect costs of our clinical program include salaries, stock based compensation, and an allocation of our facility costs. Our research and development expenses are impacted by our activities in support of both our U.S. government research contracts and our DMD and other proprietary development programs. Research and development expenses linked to our U.S. government programs are highly dependent on the timing of various activities performed by us and our third party vendors, in particular, with respect to our July 2010 Ebola and Marburg agreement. Changes in the timing of activities performed in support of this contract have, and may in the future, resulted in unexpected fluctuations in our research and development expenses from period to period. As we prepare for the initiation of a pivotal trial in eteplirsen in the second half of 2012, we anticipate that research and development expenses linked to our DMD program will increase. However, because it is difficult to predict the relative contribution of research and development expenses related to our U.S. government research contracts and those related to our DMD and other proprietary development programs, we expect that total future research and development expenses will continue to be variable.

The amount and timing of future research and development expense will depend, in part, on our ability to obtain U.S. government awards to fund the advanced development of our antiviral therapeutic candidates. Without such funding, we would likely drastically reduce our spending in these areas. Future research and development expenses may also increase if our internal projects, such as DMD, enter later stage clinical development. Our research and development programs are at an early stage and may not result in any approved products. Product candidates that appear promising at early stages of development may not reach the market for a variety of reasons. Similarly, any of our product candidates may be found to be ineffective during clinical trials, may take longer to complete clinical trials than we have anticipated, may fail to receive necessary regulatory approvals, and may prove impracticable to manufacture in commercial quantities at reasonable cost and with acceptable quality.

As a result of these uncertainties and the other risks inherent in the drug development process, we cannot determine the duration and completion costs of current or future clinical stages of any of our product candidates. Similarly, we cannot determine when, if, or to what extent we may generate revenue from the commercialization and sale of any product candidate or from the contractual funding for our infectious disease research by the U.S. government. The timeframe for development of any product candidate, associated development costs, and the probability of regulatory and commercial success vary widely.

General and Administrative. General and administrative expense consists principally of salaries, benefits, stock-based compensation expense, and related costs for personnel in our executive, finance, legal, information technology, business development and human resource functions. Other general and administrative expenses include professional fees for legal, consulting and accounting services and an allocation of our facility costs.

Interest Income (Expense) and Other, Net. Interest income (expense) and other, net, consists of interest on our cash equivalents and short-term investments and rental income and other income. Our cash equivalents consist of money market investments. Interest expense includes interest paid on our mortgage loan related to the Corvallis property held for sale. Other income includes rental income on sublease facilities.

Change in Fair Value of Warrants. Warrants issued in connection with our December 2007 and January and August 2009 equity financings are classified as liabilities due to their settlement terms. These warrants are non-cash liabilities; we are not required to expend any cash to settle these liabilities. The fair market value of these warrants was recorded on the balance sheet at issuance and

the warrants are marked to market each financial reporting period, with changes in the fair value recorded as non-operating income or loss in our statement of operations. The fair value of the warrants is determined using the Black-Scholes option-pricing model, which requires the use of significant judgment and estimates for the inputs used in the model. For more information, see Note 7—"Warrants" of the unaudited condensed consolidated financial statements included elsewhere in this report.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our condensed consolidated financial statements included elsewhere in this report. The preparation of our financial statements in accordance with accounting principles generally accepted in the United States, or GAAP, requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent assets and liabilities for the periods presented. Some of these judgments can be subjective and complex, and, consequently, actual results may differ from these estimates. For any given individual estimate or assumption we make, there may also be other estimates or assumptions that are reasonable. We believe that the estimates and judgments upon which we rely are reasonable based upon historical experience and information available to us at the time that we make these estimates and judgments. To the extent there are material differences between these estimates and actual results, our consolidated financial statements will be affected. Although we believe that our judgments and estimates are appropriate, actual results may differ from these estimates.

The policies that we believe are the most critical to aid the understanding of our financial results include:

- revenue recognition;
- impairment of long-lived assets;
- stock-based compensation; and
- accounting for and valuation of warrants classified as liabilities.

Our critical accounting policies and significant estimates are detailed in our annual report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on March 15, 2011.

Results of Operations for the Three and Nine Months Ended September 30, 2011 and 2010

The following table sets forth selected consolidated statements of operations data for each of the periods indicated:

	Three Months Ended September 30,		%	Nine Months Ended September 30,		%
	2011	2010	Change	2011	2010	Change
	(In thousands, except per share amounts)			(In thousands, except per share amounts)		
Revenue:	$ 7,524	$ 8,702	(14)%	33,405	13,903	140%
Expenses:						
Research and development	15,610	9,059	72%	48,161	22,080	118%
General and administrative	3,185	3,440	(7)%	12,171	11,017	10%
Operating loss	(11,271)	(3,797)	197%	(26,927)	(19,194)	40%
Other income (loss):						
Interest (expense) income and other, net	199	82	143%	440	170	159%
(Increase) decrease on warrant valuation	7,052	(3,578)	(297)%	25,579	(5,509)	(564)%
Net loss	$ (4,020)	$(7,293)	(45)%	$ (908)	$ (24,533)	(96)%
Basic and diluted loss per share	$ (0.03)	$ (0.07)		$ (0.01)	$ (0.22)	

Revenue

Revenue for the three months ended September 30, 2011 decreased by $1.2 million, or 14%, compared to the three months ended September 30, 2010. The decrease was due to a $5.4 million decrease in revenue associated with the May 2009 and June 2010 H1N1 U.S. government research contracts and a $0.4 million decrease in revenue associated with the 2006 U.S. government research contracts offset in part by a $4.6 million increase in revenue attributable to the July 2010 Ebola and Marburg agreement.

Revenue for the nine months ended September 30, 2011 increased by $19.5 million, or 140%, compared to the nine months ended September 30, 2010. The increase in revenue was primarily due to a $27.0 million increase attributable to the July 2010 Ebola and Marburg agreement offset in part by a $3.9 million total decrease in the May 2009 and June 2010 H1N1 U.S. government research contracts and a $3.6 million decrease associated with the 2006 U.S. government research contracts and other contracts.

Research and Development Expenses

Research and development expenses for the three months ended September 30, 2011 increased by $6.6 million, or 72%, compared to the three months ended September 30, 2010. The increase was primarily due to a $4.4 million increase in costs related to our DMD program, a $3.4 million increase in spending related to the July 2010 Ebola and Marburg agreement, a $1.6 million increase in other non-government projects, which was partially offset by $2.6 million decrease in spending related to the May 2009 and June 2010 H1N1 U.S. government research contracts, and a $0.2 million decrease in spending on the 2006 Junín contract.

Research and development expenses for the nine months ended September 30, 2011 increased by $26.1 million, or 118%, compared to the nine months ended September 30, 2010. The increase was primarily due to a $20.5 million increase in spending related to the July 2010 Ebola and Marburg agreement, a $5.3 million increase in costs related to our DMD program, $2.7 million in spending for other non-government projects, $0.6 million for severance and stock compensation expense for our former chief medical officer and $0.5 million in laboratory chemicals, which was partially offset by a $3.0 million decrease in spending on the 2006 Junín contract and the May 2009 and June 2010 H1N1 U.S. government research contracts and a decrease of $0.5 million in professional services.

General and Administrative Expenses

General and administrative expenses for the three months ended September 30, 2011 decreased by $0.3 million, or 7%, compared to the three months ended September 30, 2010. The decrease in general and administrative expense is primarily due to the decrease in legal and professional service fees of $0.9 million offset in part by a $0.3 million increase in salaries and employee related costs from increased staff, and a $0.3 million increase in costs for expanded facilities.

General and administrative expenses for the nine months ended September 30, 2011 increased by $1.1 million, or 10%, compared to the nine months ended September 30, 2010. The increase is primarily due to a $3.3 million increase in salaries, severance, and employee related costs, $0.4 million increase in professional services costs, and $0.3 million in increased costs for expanded facilities. These increased costs were partially offset by a $2.6 million decrease in severance and stock compensation expense from the first nine months of 2010 related to the departure of the former chief executive officer and lower legal costs of $0.3 million in the first nine months of 2011.

Interest (Expense) Income and Other, Net

Interest income (expense) and other, net, for the three and nine months ended September 30, 2011 increased approximately $0.1 million and $0.3 million, respectively, compared to the three and nine months ended September 30, 2010. The increase in interest income (expense) and other, net, for the three and nine months ended September 30, 2011 compared to the prior year periods was attributable to increased interest earnings on our invested cash and cash equivalents.

Change in Fair Value of Warrant Liability

The changes in fair value of warrant liability for the three and nine months ended September 30, 2011 compared to the three month and nine months ended September 30, 2010 was primarily attributable to changes in our stock price. See "—Key Financial Metrics—Change in Fair Value of Warrants," "—Critical Accounting Policies—Warrant Liability," and Note 7 to the unaudited condensed consolidated financial statements included elsewhere in this report.

Net Loss

Net loss for the three months ended September 30, 2011 was $4.0 million, compared to the net loss of $7.3 million for the three months ended September 30, 2010, a decrease of $3.3 million. Net loss for the nine months ended September 30, 2011 was $0.9 million, compared to the net loss of $24.5 million for the nine months ended September 30, 2010, a change of $23.6 million. The decrease in net loss for the three and nine months ended September 30, 2011 was due primarily to the decrease in warrant liability and offset by higher operating losses.

Liquidity and Capital Resources

At September 30, 2011, cash and cash equivalents were $46.4 million, compared to $33.6 million at December 31, 2010. Our principal sources of liquidity are equity financings and revenue from our U.S. government research contracts. Our principal uses of cash are research and development expenses, general and administrative expenses and other working capital requirements. Based on the factors described below, we believe that our currently available cash and cash equivalents, exclusive of the U.S. government exercising its options under the 2010 Ebola and Marburg agreement, are sufficient to finance our operations for at least the next 12 months.

Sources of Funds

Our primary source of revenue is from development of product candidates pursuant to our contracts with the U.S. government. Government funding is subject to the U.S. government's appropriations process and the U.S. government has the right under our contracts with them to terminate such contracts for convenience. If U.S. government funding is not received or is delayed, our results of operations would be materially and adversely affected and we may need to seek additional sources of capital. We do not generate any revenue from non-government, commercial sale of our pharmaceutical product candidates.

In April 2011, we sold 23.0 million shares of our common stock at $1.50 per share in an offering registered under the Securities Act of 1933, or the Securities Act. The offering generated net proceeds of approximately $32.1 million.

We will require additional capital from time to time in order to fund our operations, continue the development of products and to expand our product portfolio. We expect to seek additional financing primarily from, but not limited to, the sale and issuance of equity or debt securities. We cannot assure you that financing will be available when and as needed or that, if available, the financings will be on favorable or acceptable terms. If we are unable to obtain additional financing when and if we require, it would have a material adverse effect on our business and results of operations. To the extent we issue additional equity securities, our existing shareholders could experience substantial dilution.

We have never generated revenue from the sale of commercial products and cannot offer any assurances that we will be able to do so in the future.

Uses of Funds

From inception in 1980 through the date of this report, our accumulated deficit is $308.6 million. Our principal uses of cash have been research and development expenses, general and administrative expenses, costs associated with the acquisition of in-process research and development and other working capital requirements.

Historical Trends

	Nine Months Ended September 30,	
	2011	2010
	(in thousands)	
Cash provided by (used in):		
Operating activities	$ (18,031)	$ (13,321)
Investing activities	(1,521)	(1,454)
Financing activities	32,319	2,467
Increase (decrease) in cash and equivalents	$ 12,767	$ (12,308)

Operating Activities. We used $18.0 million of cash in operating activities for the nine months ended September 30, 2011, compared to $13.3 million of cash used in operating activities for the nine months ended September 30, 2010. The increase in cash used in operations of $4.7 million was the primary result of increased spending of research and development activities. Cash from accounts receivable and other current assets increased $1.9 million, cash used by accounts payable, accrued employee compensation and other liabilities decreased by $1.6 million and all other cash used in operating activities increased by $8.2 million.

Investing Activities. We used $1.5 million of cash in investing activities for the nine months ended September 30, 2011, which is comparable to the $1.5 million of cash used in investing activities for the nine months ended September 30, 2010.

Financing Activities. Financing activities provided $32.3 million of cash primarily due to the April 2011 equity financing that generated net proceeds of $32.1 million (See Note 10 — "Equity Financings" to the unaudited condensed consolidated financial statements included elsewhere in this report for more information) and warrant and option exercises of $0.3 million for the nine months ended September 30, 2011. Cash used by financing activities for the nine months ended September 30, 2011 was attributable to debt repayments.

Our future expenditures and capital requirements depend on numerous factors, most of which are difficult to project beyond the short term. These requirements include our ability to meet the requirements of our U.S. government research projects, the progress of our research and development programs and our pre-clinical and clinical trials, the time and costs involved in obtaining regulatory approvals, the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights, competing technological and market developments, our ability to establish collaborative arrangements and the terms of any such arrangements, and the costs associated with commercialization of our products. Our cash requirements are expected to continue to increase as we advance our research, development and commercialization programs.

Contractual Obligations and Contingencies

In our continuing operations, we have entered into long-term contractual arrangements from time to time for our facilities, the provision of goods and services, and acquisition of technology access rights, among others. The following table presents noncancelable contractual obligations arising from these arrangements as of September 30, 2011:

	Payments Due by Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
	(in thousands)				
Long-term debt	$ 1,863	$ 84	$ 180	$ 305	$ 1,294
Operating leases	16,440	2,508	4,112	3,012	6,808
Royalty payments	1,243	100	160	390	593
Goods and services	4,029	4,029	—	—	—
Total	$23,575	$6,721	$4,452	$3,707	$8,695

Off Balance Sheet Arrangements

During the periods presented, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or for another contractually narrow or limited purpose.

Recent Accounting Pronouncements

See Note 12 to the unaudited condensed consolidated financial statements contained in Part I, Item 1 of this report.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

Interest Rate Sensitivity

We had cash and cash equivalents of $46.4 million and $33.6 million at September 30, 2011 and December 31, 2010, respectively. We do not enter into investments for trading or speculative purposes; our cash equivalents are invested in money market accounts. We believe that we do not have any material exposure to changes in the fair value of these assets in the near term due to extremely low rates of investment interest and to the short term nature of our cash and cash equivalents. Future declines in interest rates, however, would reduce investment income, but are not likely to be a material source of revenue to our company in the foreseeable future. A 0.01% decline in interest rates, occurring January 1, 2011 and sustained throughout the period ended September 30, 2011, would result in a decline in investment income of approximately $4,000 for that same period.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation as of the end of the period covered by this report, under the supervision and with the participation of our management, including (1) our chief executive officer and principal financial officer and (2) our principal accounting officer, of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act. The purpose of this evaluation was to determine whether as of the evaluation date our disclosure controls and procedures were effective to provide reasonable assurance that the information we are required to disclose in our filings with the Securities and Exchange Commission, or SEC, under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including our chief executive officer and principal financial officer and our principal accounting officer, as appropriate, to allow timely decisions regarding required disclosure. Based on that evaluation, management has concluded that as of September 30, 2011, our disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended September 30, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

As of the date of this report, we are not a party to any material legal proceedings with respect to us, our subsidiaries, or any of our material properties. In the normal course of business, we may from time to time be named as a party to various legal claims, actions and complaints, including matters involving employment, intellectual property, effects from the use of drugs utilizing our technology, or others. It is impossible to predict with certainty whether any resulting liability would have a material adverse effect on our financial position, results of operations or cash flows.

Item 1A. Risk Factors.

Set forth below and elsewhere in this report and in other documents we file with the SEC are descriptions of risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements contained in this report. Because of the following factors, as well as other variables affecting our operating results, past financial performance should not be considered a reliable indicator of future performance and investors should not use historical trends to anticipate results or trends in future periods. The risks and uncertainties described below are not the only ones facing us. Other events that we do not currently anticipate or that we currently deem immaterial also affect our results of operations and financial condition.

Risks Relating to Our Business

Our product candidates are at an early stage of development, and it is possible that none of our product candidates will ever become commercial products.

Our product candidates are in relatively early stages of development. These product candidates will require significant further development, financial resources and personnel to obtain regulatory approval and develop into commercially viable products, if at all. Currently, eteplirsen in DMD, AVI-6002 in Ebola, AVI-6003 in Marburg and AVI-7100 in influenza are in clinical trials, and the rest of our product candidates are in preclinical development. We expect that much of our effort and many of our expenditures over the next several years will be devoted to development activities associated with eteplirsen in DMD and our antiviral candidates. With current resources, we may be restricted or delayed in our ability to develop other clinical and preclinical product candidates.

Our ability to commercialize any of our product candidates, including eteplirsen, depends on first receiving required regulatory approvals, and it is possible that we may never receive regulatory approval for any of our product candidates based on an inability to adequately demonstrate the safety and effectiveness of our product candidates, lack of funding, changes in the regulatory landscape or other reasons. Even if a product candidate receives regulatory approval, the resulting product may not gain market acceptance among physicians, patients, healthcare payers and the medical community. Assuming that any of our product candidates receives the required regulatory approvals, commercial success will depend on a number of factors, including:

- establishment and demonstration of clinical efficacy and safety to the medical community;
- cost-effectiveness of the product;
- the availability of adequate reimbursement by third parties, including governmental payors such as the Medicare and Medicaid programs, managed care organizations, and private health insurers;
- the product's potential advantage over alternative treatment methods;
- whether the product can be produced in commercial quantities at acceptable costs;
- marketing and distribution support for the product; and
- any exclusivities applicable to the product.

Although to date we have been granted orphan status for two of our product candidates in DMD and are seeking orphan status for AVI-6002 and AVI-6003, we are not guaranteed to receive orphan exclusivity based on that status and would not enjoy such exclusivity in the event that another entity could get approval of the same product for the same indication before we receive market approval. Further, application of the orphan drug regulations in the U.S. and Europe is uncertain and we cannot predict how the respective regulatory bodies will interpret and apply the regulations to our or our competitors' product candidates. If another product receives orphan drug status for an indication that we are targeting, and such product is approved for commercial sales before our product, regulators may interpret our product to be the same drug as the competing product and could prevent us from selling our product in the applicable territories. Furthermore, pediatric exclusivity only applies if another product with exclusivity has not received regulatory approval, so if another regulatory exclusivity or patent protection exists for the product once it is approved, we would not receive the benefit of any pediatric exclusivity.

If we are unable to develop and commercialize any of our product candidates, if development is delayed or if sales revenue from any product candidate that receives marketing approval is insufficient, we may never reach sustained profitability.

If we are unable to obtain or maintain required regulatory approvals, we will not be able to commercialize our product candidates, our ability to generate revenue will be materially impaired and our business will not be successful.

The research, testing, manufacturing, labeling, approval, selling, marketing and distribution of drug products are subject to extensive regulation by the FDA in the United States, and other regulatory authorities in other countries, with regulations differing from country to country. Marketing of our product candidates in the United States or foreign countries is not permitted until we obtain marketing approval from the FDA or other foreign regulatory authorities, and we may never receive regulatory approval for the commercial sale of any of our product candidates. Obtaining marketing approval is a lengthy, expensive and uncertain process and approval is never assured. As of the date of this report, we have not progressed to the point of preparing or filing the applications necessary to gain regulatory approvals. Further, the FDA and other foreign regulatory agencies have substantial discretion in the approval process, and determining when or whether regulatory approval will be obtained for any product candidate we develop. In this regard, even if we believe the data collected from clinical trials of our product candidates are promising, such data may not be sufficient to support approval by the FDA or any other foreign regulatory authority. In addition, the FDA or their advisors may disagree with our interpretations of data from preclinical studies and clinical trials. Regulatory agencies may approve a product candidate for fewer indications than requested or may grant approval subject to the performance of post-approval studies for a product candidate. Similarly, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates.

In addition, changes in regulatory requirements and guidance may occur and we may need to amend clinical trial protocols or other approval strategies to reflect these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical trial. Changes in our approval strategies may require additional studies that were not originally planned. Other factors may also impact our ability to commercialize our product candidates, including, for example, the fact that a therapeutic commercial product utilizing our RNA-based technologies has never been approved by any regulatory authority. Due to these factors, our current product candidates or any of our other future product candidates could take a significantly longer time to gain regulatory approval than we expect or may never gain regulatory approval, which could delay or eliminate any potential product revenue by delaying or terminating the potential commercialization of our product candidates.

If we receive regulatory approval for our product candidates, we will also be subject to ongoing FDA obligations and oversight, including adverse event reporting requirements, marketing restrictions and, potentially, other post-marketing obligations, all of which may result in significant expense and limit our ability to commercialize such products. The FDA's policies may also change and additional government regulations may be enacted that could prevent or delay regulatory approval of our product candidates or further restrict or regulate post-approval activities. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States, or abroad. If we are not able to maintain regulatory compliance, we may be subject to civil and criminal penalties, we may not be permitted to market our products and our business could suffer. Any delay in, or failure to, receive or maintain regulatory approval for any of our product candidates could harm our business and prevent us from ever generating meaningful revenues or achieving profitability. We will need to obtain regulatory approval from authorities in foreign countries to market our product candidates in those countries. We have not filed for regulatory approval to market our product candidates in any foreign jurisdiction. Approval by one regulatory authority does not ensure approval by regulatory authorities in other jurisdictions. If we fail to obtain approvals from foreign jurisdictions, the geographic market for our product candidates would be limited.

Our clinical trials may fail to demonstrate acceptable levels of safety and efficacy of our product candidates, which could prevent or significantly delay their regulatory approval.

To obtain the requisite regulatory approvals to market and sell any of our product candidates, we must demonstrate, through extensive preclinical and clinical studies, that the product candidate is safe and effective in humans. Ongoing and future clinical trials of our product candidates may not show sufficient safety or efficacy to obtain regulatory approvals.

Phase I clinical trials generally are not designed to test the efficacy of a product candidate but rather are designed to test safety, to study pharmacokinetics and pharmacodynamics and to understand the product candidate's side effects at various doses and dosing schedules in healthy volunteers. Delays in establishing the appropriate dosage levels can lead to delays in the overall clinical development of a product candidate. As of the date of this report, we do not believe that we have identified a consistently effective dose of eteplirsen for individuals with DMD. We initiated a U.S.-based clinical trial for eteplirsen at higher doses in August 2011 to further explore and identify a more consistently effective dose that may be more appropriate for future clinical trials and that can serve as a basis for approval by governmental regulatory authorities; however, we cannot assure you that these efforts will be successful. If a consistently effective dose is found in the U.S.-based clinical trial, we will expect to engage in discussions with regulatory authorities about the design and subsequent execution of any further studies which may be required. Regulatory authorities might require more extensive clinical trials than anticipated and conforming to any guidance regulatory authorities provide does not guarantee receipt of marketing approval, even if we believe our clinical trials are successful. Such additional clinical trials might include an open label "extension study" for all participants who have previously received eteplirsen, as well as other participants (e.g., non-ambulatory participants) and any additional placebo-controlled "pivotal" study or studies. If we are not able to establish an optimal dosage in this trial we may need to conduct additional dose-ranging trials before conducting our pivotal trials of the product. Any such additional clinical trials required by regulatory authorities would increase our costs and delay commercialization of eteplirsen.

Furthermore, success in preclinical and early clinical trials does not ensure that later larger-scale trials will be successful nor does it predict final results. Acceptable results in early trials may not be reproduced in later trials. For example, pivotal trials for eteplirsen will likely involve a larger number of participants to achieve statistical significance, will be expensive and will take a substantial amount of time to complete. As a result, we may conduct lengthy and expensive clinical trials of our product candidates, only to learn that the product candidate is not an effective treatment or is not superior to existing approved therapies, or has an unacceptable safety profile, which could prevent or significantly delay regulatory approval for such product candidate.

The Animal Rule is a new and seldom-used approach to seeking approval of a new drug and our infectious disease program may not meet the requirements for approval under this pathway.

In the United States, we plan to develop the therapeutic product candidates to treat Ebola and Marburg viruses using the Animal Rule regulatory mechanism. There is no guarantee that the FDA will agree to this approach to the development of our infectious disease product candidates, and if they do not we will have to take a more traditional approach to the development of these products, which may not be possible given ethical considerations and other limitations associated with these deadly diseases. Pursuant to the Animal Rule, the sponsor of a drug product must demonstrate efficacy in animal models and safety in humans. No animal model is established as predicting human outcomes in the prevention or treatment of any filovirus disease. We have yet to demonstrate the predictive value of our animal studies to the FDA's satisfaction. If we fail to do so, we will have to demonstrate efficacy of AVI-6002 and AVI-6003 through adequate well-controlled trials in humans in order to obtain regulatory approval of these products in the United States, which will greatly add to the time and expense required to commercialize these products. Furthermore, the Animal Rule mechanism has become available only relatively recently and has been infrequently used. We do not have any

experience successfully navigating this approach to drug approval. The Animal Rule approach has yet to be well tested generally and is currently under evaluation by the FDA. Even if the Animal Rule represents a viable approach to seeking approval of these products, it may present challenges for gaining final regulatory approval for these product candidates, including an extended timeline to approval and less predictable study requirements.

We rely on U.S. government contracts to support several important research and development programs and substantially all of our revenue. If the U.S. government fails to fund such programs on a timely basis or at all, or such contracts are terminated, the results of our operations would be materially and adversely affected.

We rely on U.S. government contracts and awards to fund several of our development programs, including those for the Ebola and Marburg viruses and for substantially all of our current revenue.

The funding of U.S. government programs is subject to Congressional appropriations. Congress generally appropriates funds on a fiscal year basis even though a program may extend over several fiscal years. Consequently, programs are often only partially funded initially and additional funds are committed only as Congress makes further appropriations. If appropriations for one of our programs become unavailable, or are reduced or delayed, our contracts may be terminated or adjusted by the government, which could have a negative impact on our future revenue under such contract or subcontract. From time to time, when a formal appropriation bill has not been signed into law before the end of the U.S. government's fiscal year, Congress may pass a continuing resolution that authorizes agencies of the U.S. government to continue to operate, generally at the same funding levels from the prior year, but does not authorize new spending initiatives, during a certain period. During such a period, or until the regular appropriation bills are passed, delays can occur in government procurement due to lack of funding and such delays can affect our operations during the period of delay.

In addition, U.S. government contracts generally also permit the government to terminate the contract, in whole or in part, without prior notice, at the government's convenience or for default based on performance. If one of our contracts is terminated for convenience, we would generally be entitled to payments for our allowable costs and would receive some allowance for profit on the work performed. If one of our contracts is terminated for default, we would generally be entitled to payments for our work that has been completed to that point. A termination arising out of our default could expose us to liability and have a negative impact on our ability to obtain future contracts. Furthermore, if we fail to satisfy certain performance or deliverable requirements or to adhere to development timelines, revenues associated with the satisfaction of such requirements or timelines may be delayed or may not be realized.

The termination of one or more of these government contracts, whether due to lack of funding, for convenience, for our failure to perform, or otherwise, or the occurrence of delays or product failures in connection with one or more of these contracts, could negatively impact our financial condition. Furthermore, we can give no assurance that we would be able to procure new U.S. government contracts to offset the revenue lost as a result of termination of any of our existing contracts. Even if our contracts are not terminated and are completed, there is no assurance that we will receive future government contracts. For example, in June 2011, we submitted two responses to a request for proposal, or RFP, announced by the DoD seeking the full clinical development of our influenza drug candidate, AVI-7100. One of our proposals was for post-exposure prophylaxis and the other proposal was for post-symptomatic treatment. We were subsequently informed by the DoD that our proposal for post-symptomatic treatment did not meet all of the technical requirements for acceptance and was removed from further consideration. Our post-exposure prophylaxis proposal met the technical requirements for acceptance and additional consideration; however, we were informed in October 2011 that, following an integrated assessment of all of the evaluation factors, the DoD determined that the prophylaxis proposal was not within the required competitive range for a contract award.

Our U.S. government contracts may be terminated and we may be liable for penalties under a variety of procurement rules and regulations and changes in government regulations or practices could adversely affect our profitability, cash balances or growth prospects.

We must comply with laws and regulations relating to the formation, administration and performance of U.S. government contracts, which affect how we do business with our customers. Such laws and regulations may potentially impose added costs on our business and our failure to comply with them may lead to penalties and the termination of our U.S. government contracts. Some significant regulations that affect us include:

- the Federal Acquisition Regulation and supplements, which regulate the formation, administration and performance of U.S. government contracts;
- the Truth in Negotiations Act, which requires certification and disclosure of cost and pricing data in connection with contract negotiations; and
- the Cost Accounting Standards, which impose accounting requirements that govern our right to reimbursement under certain cost-based government contracts.

Our contracts with the U.S. government are subject to periodic review and investigation. If such a review or investigation identifies improper or illegal activities, we may be subject to civil or criminal penalties or administrative sanctions, including the termination of contracts, forfeiture of profits, the triggering of price reduction clauses, suspension of payments, fines and suspension or debarment from doing business with U.S. government agencies. We could also suffer harm to our reputation if allegations of impropriety were made against us, which would impair our ability to win awards of contracts in the future or receive renewals of existing contracts.

In addition, U.S. government agencies routinely audit and review their contractors' performance on contracts, cost structure, pricing practices and compliance with applicable laws, regulations and standards. They also review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and management information systems. Such audits may result in adjustments to our contract costs, and any costs found to be improperly allocated will not be reimbursed. We have recorded contract revenues for the periods presented in this report based upon costs we expect to realize upon final audit; however, we do not know the outcome of any future audits and adjustments and, if future audit adjustments exceed our estimates, our results of operations could be adversely affected. Additionally, we may be required to enter into agreements and subcontracts with third parties, including suppliers, consultants and other third party contractors in order to satisfy our contractual obligations pursuant to our agreements with the U.S. government. Negotiating and entering into such arrangements can be time-consuming and we may not be able to reach agreement with such third parties. Any such agreement also has to be compliant with the terms of our government grants. Any delay or inability to enter into such arrangements or entering into such arrangements in a manner that is non-compliant with the terms of our grants, may result in violations of our contracts with the U.S. government.

Clinical trials for our product candidates are expensive and time consuming, may take longer than we expect or may not be completed at all, and their outcomes are uncertain.

We have completed a Phase Ib/II clinical trial for eteplirsen in the UK and announced results in October 2010. We also initiated a U.S.-based Phase II trial in eteplirsen in August 2011 and expect to commence additional trials of eteplirsen and other product candidates in the future. Each of our clinical trials requires the investment of substantial planning, expense and time and the timing of the commencement, continuation and completion of these clinical trials may be subject to significant delays relating to various causes, including scheduling conflicts with participating clinicians and clinical institutions, difficulties in identifying and enrolling participants who meet trial eligibility criteria, failure of participants to complete the clinical trial, delay or failure to obtain IRB or other regulatory approval to conduct a clinical trial at a prospective site, unexpected adverse events and shortages of available drug supply. Participant enrollment is a function of many factors, including the size of the relevant population, the proximity of participants to clinical sites, the eligibility criteria for the trial, the existence of competing clinical trials and the availability of alternative or new treatments. We depend on medical institutions and clinical research organizations, or CROs, to conduct our clinical trials in compliance with Good Clinical Practice, or GCP, and to the extent they fail to enroll participants for our clinical trials, fail to conduct the study to GCP standards or are delayed for a significant time in the execution of our trials, including achieving full enrollment, we may be affected by increased costs, program delays or both, which may harm our business. In addition, we conduct clinical trials in foreign countries which may subject us to further delays and expenses as a result of increased drug shipment costs, additional regulatory requirements and the engagement of foreign CROs, as well as expose us to risks associated with less experienced clinical investigators who are unknown to the FDA, and different standards of medical care. Foreign currency transactions insofar as changes in the relative value of the U.S. dollar to the foreign currency where the trial is being conducted may impact our actual costs. In addition, for some programs (e.g., DMD and Ebola and Marburg infections) there are currently no approved drugs to compare against and an agreement about how to measure efficacy has yet to be reached with the FDA and then demonstrated.

Clinical trials must be conducted in accordance with FDA or other applicable foreign government guidelines and are subject to oversight by the FDA, other foreign governmental agencies and IRBs at the medical institutions where the clinical trials are conducted. In addition, clinical trials must be conducted with supplies of our product candidates produced under cGMP and other requirements in foreign countries, and may require large numbers of participants. The FDA or other foreign governmental agencies or we ourselves could delay, suspend or halt our clinical trials of a product candidate for numerous reasons, including:

- deficiencies in the trial design;
- deficiencies in the conduct of the clinical trial including failure to conduct the clinical trial in accordance with regulatory requirements or clinical protocols;

- deficiencies in the clinical trial operations or trial sites resulting in the imposition of a clinical hold;
- the product candidate may have unforeseen adverse side effects, including fatalities, or a determination may be made that a clinical trial presents unacceptable health risks;
- the time required to determine whether the product candidate is effective may be longer than expected;
- fatalities or other adverse events arising during a clinical trial that may not be related to clinical trial treatments;
- the product candidate may appear to be no more effective than current therapies;
- the quality or stability of the product candidate may fail to conform to acceptable standards;
- our inability to produce or obtain sufficient quantities of the product candidate to complete the trials;
- our inability to reach 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;
- our inability to obtain IRB approval to conduct a clinical trial at a prospective site;
- our inability to obtain regulatory approval to conduct a clinical trial;
- lack of adequate funding to continue the clinical trial, including the occurrence of unforeseen costs due to enrollment delays, requirements to conduct additional trials and studies and increased expenses associated with the services of our CROs and other third parties;
- our inability to recruit and enroll individuals to participate in clinical trials for reasons including competition from other clinical trial programs for the same or similar indications; or
- our inability to retain participants 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.

In addition, we may experience significant setbacks in advanced clinical trials, even after promising results in earlier trials, such as unexpected adverse events that occur when our product candidates are combined with other therapies and drugs or given to larger populations, which often occur in later-stage clinical trials. In addition, clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. Also, patient advocacy groups and parents of trial participants may demand additional clinical trials or continued access to drug even if our interpretation of clinical results received thus far leads us to determine that additional clinical trials or continued access are unwarranted. Any disagreement with patient advocacy groups or parents of trial participants may require management's time and attention and may result in legal proceedings being instituted against us, which could be expensive, time-consuming and distracting, and may result in delay of the program. Negative or inconclusive results or adverse medical events, including participant fatalities that may be attributable to our product candidates, during a clinical trial may necessitate that it be redesigned, repeated or terminated. Further, some of our clinical trials may be overseen by an independent data safety monitoring board, or DSMB, and the DSMB may determine to delay or suspend one or more of these trials due to safety or futility findings based on events occurring during a clinical trial. Any such delay, suspension, termination or request to repeat or redesign a trial could increase our costs and prevent or significantly delay our ability to commercialize our product candidates.

We historically have incurred net losses since our inception and we may not achieve or sustain profitability.

We had an operating loss of $26.9 million for the nine months ended September 30, 2011, and incurred a net loss of $32.2 million for the year ended December 31, 2010. As of September 30, 2011, our accumulated deficit was $308.6 million. Our losses have resulted principally from expenses incurred in research and development of our technology and products and from general and administrative expenses that we have incurred while building our business infrastructure. We expect to continue to incur significant operating losses in the future as we continue our research and development efforts and seek to obtain regulatory approval of our products. Our ability to achieve profitability depends on our ability to raise additional capital, partner one or more programs, complete development of our products, obtain regulatory approvals and market our products. It is uncertain when, if ever, we will become profitable.

We will need additional funds to conduct our planned research and development efforts. If we fail to continue to attract significant capital or fail to enter into strategic relationships, we may be unable to continue to develop our product candidates.

We will require additional capital from time to time in the future in order to continue the development of product candidates in our pipeline and to expand our product portfolio. The actual amount of funds that we will need will be determined by many factors, some of which are beyond our control. These factors include the success of our research and development efforts, the status of our pre-clinical and clinical testing, costs relating to securing regulatory approvals and the costs and timing of obtaining new patent rights, regulatory changes and competitive and technological developments in the market. An unforeseen change in these factors, or others, might increase our need for additional capital.

We would expect to seek additional financing from the sale and issuance of equity or equity-linked or debt securities, and we cannot predict that financing will be available when and as we need financing or that, if available, the financing terms will be commercially reasonable. If we are unable to obtain additional financing, when and if we require or on commercially reasonable terms, it would have a material adverse effect on our business and results of operations.

If we are able to consummate such financings, the trading price of our common stock could be adversely affected and/or the terms of such financings may adversely affect the interests of our existing shareholders. To the extent we issue additional equity securities, our existing shareholders could experience substantial dilution in their economic and voting rights. For example, in connection with our December 2007, January 2009, August 2009 and April 2011 financings, we sold an aggregate of 72.2 million shares of our common stock and issued warrants to purchase an additional 29.7 million shares of our common stock.

Further, we may also enter into relationships with pharmaceutical or biotechnology companies to perform research and development with respect to our RNA-based technologies, research programs or to conduct clinical trials and to market our product candidates. We currently do not have a strategic relationship with a third party to perform research or development using our RNA-based technologies or assist us in funding the continued development and commercialization of any of our programs or drug candidates other than that with the U.S. government. If we are unable to enter into partnerships or strategic relationships with respect to our technologies or any of our programs or drug candidates on favorable terms it may impede our ability to discover, develop and commercialize our product candidates.

We currently rely on third-party manufacturers and other third parties for production of our drug products and our dependence on these manufacturers may impair the advancement of our research and development programs and the development of our product candidates.

We do not currently have the internal ability to manufacture the product candidates that we need to conduct our clinical trials and we rely upon a limited number of manufacturers to supply our product candidates and the components of our drug substance. We may also need to rely on manufacturers for the production of our product candidates to support our research and development programs. In addition, we rely on other third parties to perform additional steps in the manufacturing process, including filling and labeling of vials and storage of our product candidates. For the foreseeable future, we expect to continue to rely on contract manufacturers and other third parties to produce, fill vials and store sufficient quantities of our product candidates for use in our research and development programs and clinical trials. For example, for our Ebola and Marburg hemorrhagic fever virus development programs, we have entered into agreements with two multinational manufacturing firms for the production of the API for Ebola and Marburg therapeutics. There is a limited number of companies that can produce PMO in the quantities and with the quality and purity that we require for our development efforts. This might limit our ability to rapidly expand our programs or commercialize our products. If we are required to seek alternative supply arrangements, the resulting delays and potential inability to find suitable replacements or bring on-line new suppliers could materially and adversely impact our business.

Our product candidates require precise high-quality manufacturing. The failure to achieve and maintain high quality standards, including failure to detect or control anticipated or unanticipated manufacturing errors could result in patient injury or death or product recalls. Contract drug manufacturers often encounter difficulties involving production yields, quality control and quality assurance and shortages of qualified personnel. If our contract manufacturers or other third parties fail to deliver our product candidates for our research and development programs and for clinical use on a timely basis, with sufficient quality, and at commercially reasonable prices, and we fail to find replacement manufacturers or to develop our own manufacturing capabilities, we may be required to delay or suspend clinical trials, research and development programs or otherwise discontinue development and production of our product candidates. In addition, we depend on outside vendors for the supply of raw materials used to produce our product candidates. If the third-party suppliers were to cease production or otherwise fail to supply us with quality raw materials and we are unable to contract on acceptable terms for these raw materials with alternative suppliers, our ability to have our product candidates manufactured and to conduct preclinical testing and clinical trials of our product candidates would be adversely affected.

We do not yet have all of the agreements necessary for the supply of our product candidates in quantities sufficient for commercial sale and we may not be able to establish or maintain sufficient commercial manufacturing arrangements on commercially reasonable terms. Securing commercial quantities of our product candidates from contract manufacturers will require us to commit significant capital and resources. We may also be required to enter into long-term manufacturing agreements that contain exclusivity provisions and/or substantial termination penalties. In addition, contract manufacturers have a limited number of facilities in which our product candidates can be produced and any interruption of the operation of those facilities due to events such as equipment malfunction or failure or damage to the facility by natural disasters could result in the cancellation of shipments, loss of product in the manufacturing process or a shortfall in available product candidates.

Our contract manufacturers are required to produce our clinical product candidates under current Good Manufacturing Practice, or cGMP, conditions in order to meet acceptable standards for our clinical trials. If such standards change, the ability of contract manufacturers to produce our product candidates on the schedule we require for our clinical trials may be affected. In addition, contract manufacturers may not perform their obligations under their agreements with us or may discontinue their business before the time required by us to successfully produce and market our product candidates. We and our contract manufacturers are subject to periodic unannounced inspection by the FDA and corresponding state and foreign authorities to ensure strict compliance with cGMP and other applicable government regulations and corresponding foreign standards. We do not have control over a third-party manufacturer's compliance with these regulations and standards. Any difficulties or delays in our contractors' manufacturing and supply of product candidates or any failure of our contractors to maintain compliance with the applicable regulations and standards could increase our costs, cause us to lose revenue, make us postpone or cancel clinical trials, prevent or delay regulatory approval by the FDA and corresponding state and foreign authorities, prevent the import and/or export of our product candidates, or cause our products to be recalled or withdrawn.

We may not be able to successfully scale-up manufacturing of our product candidates in sufficient quality and quantity, which would delay or prevent us from developing our product candidates and commercializing resulting approved drug products, if any.

To date, our product candidates have been manufactured in small quantities for preclinical studies and early stage clinical trials. In order to conduct larger or late-stage scale clinical trials for a product candidate and for commercialization of the resulting drug product if that product candidate is approved for sale, we will need to manufacture it in larger quantities. We may not be able to successfully increase the manufacturing capacity for any of our product candidates, whether in collaboration with third-party manufacturers or on our own, in a timely or cost-effective manner or at all. If a contract manufacturer makes improvements in the manufacturing process for our product candidates, we may not own, or may have to share, the intellectual property rights to those improvements. Significant scale-up of manufacturing may require additional validation studies, which are costly and which the FDA must review and approve. In addition, quality issues may arise during those scale-up activities because of the inherent properties of a product candidate itself or of a product candidate in combination with other components added during the manufacturing and packaging process, or during shipping and storage of the finished product or active pharmaceutical ingredients. If we are unable to successfully scale-up manufacture of any of our product candidates in sufficient quality and quantity, the development of that product candidate and regulatory approval or commercial launch for any resulting drug products may be delayed or there may be a shortage in supply, which could significantly harm our business.

We rely on third parties to provide services in connection with our preclinical and clinical development programs. The inadequate performance by or loss of any of these service providers could affect our product candidate development.

Several third parties provide services in connection with our preclinical and clinical development programs, including *in vitro* and *in vivo* studies, assay and reagent development, immunohistochemistry, toxicology, pharmacokinetics, clinical assessments, data monitoring and management and statistical analysis and other outsourced activities. If these service providers do not adequately perform the services for which we have contracted or cease to continue operations and we are not able to quickly find a replacement provider or we lose information or items associated with our product candidates, our development programs may be delayed.

Our RNA-based, or antisense, technology has not been incorporated into a therapeutic commercial product and is still at a relatively early stage of development.

Our RNA-based platforms, utilizing proprietary antisense technology, have not been incorporated into a therapeutic commercial product and are still at a relatively early stage of development. This antisense technology is used in all of our therapeutic candidates, including eteplirsen. We are conducting toxicology, pharmacology, pharmacokinetics and other preclinical studies and, although we have initiated clinical trials for AVI-6002, AVI-6003 and AVI-7100 and initiated a Phase II clinical trial in eteplirsen in August 2011, additional preclinical studies may be required for these product candidates and before other product candidates enter human clinical trials. In addition, preclinical models to study participant toxicity and activity of compounds are not necessarily predictive of toxicity or efficacy of these compounds in the treatment of human disease and there may be substantially different results in clinical trials from the results obtained in preclinical studies. Any failures or setbacks utilizing our antisense technology, including adverse effects resulting from the use of this technology in humans, could have a detrimental impact on our internal product candidate pipeline and our ability to maintain and/or enter into new corporate collaborations regarding these technologies, which would negatively affect our business and financial position.

If we fail to retain our key personnel or are unable to attract and retain additional qualified personnel, our future growth, ability to perform our U.S. government contracts and our ability to compete would suffer.

We are highly dependent on the efforts and abilities of the principal members of our senior management. Additionally, we have scientific personnel with significant and unique expertise in RNA-based therapeutics and related technologies and personnel with experience overseeing compliance with and execution of the terms of our U.S. government contracts. The loss of the services of any one of the principal members of our managerial, scientific or government contract compliance staff may prevent us from achieving our business objectives.

The competition for qualified personnel in the biotechnology field and for qualified personnel with government contracting experience is intense, and our future success depends upon our ability to attract, retain and motivate such personnel. In order to develop and commercialize our products successfully, we will be required to retain key managerial, scientific and government contract compliance staff. In certain instances, we may also need to expand our workforce and our management ranks. We face intense competition for qualified individuals from numerous pharmaceutical and biotechnology companies, as well as academic and other research institutions. If we are unable to attract, assimilate or retain such key personnel, our ability to advance our proprietary programs and perform our U.S. government contracts would be adversely affected. Any failure to perform under our U.S. government contracts could result in a termination of the agreement, which would harm our business.

Recent changes in our executive leadership and any similar changes in the future may serve as a significant distraction for our management and employees.

In January 2011, Christopher Garabedian, a member of our board of directors, was hired to serve as our president and chief executive officer. Since the beginning of 2011, there have been a number of changes to our executive leadership team, including the departure of four senior vice presidents and the addition of our general counsel, our chief scientific officer, our chief medical officer and our vice president of finance.

Such changes, or any other future changes in our executive leadership, may disrupt our operations as we adjust to the reallocation of responsibilities and assimilate new leadership and, potentially, differing perspectives on our strategic direction. If the transition in executive leadership is not smooth, the resulting disruption could negatively affect our operations and impede our ability to execute our strategic plan.

We may engage in future acquisitions that increase our capital requirements, dilute our shareholders, cause us to incur debt or assume contingent liabilities and subject us to other risks.

We actively evaluate various strategic transactions on an ongoing basis, including licensing or acquiring complementary products, technologies or businesses. Any potential acquisitions may entail numerous risks, including increased operating expenses and cash requirements, assimilation of operations and products, retention of key employees, diversion of our management's attention and uncertainties in our ability to maintain key business relationships of the acquired entities. In addition, if we undertake acquisitions, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense.

Asserting, defending and maintaining our intellectual property rights could be challenging and costly, and our failure to do so could harm our ability to compete and impair the outcome of our operations. The pharmaceutical, biotechnology and academic environments are highly competitive and competing intellectual property could limit our ability to protect our products.

Our success will depend in significant part on our existing intellectually property rights and our ability to obtain additional patents and licenses in the future. As of September 30, 2011, we owned or controlled approximately 258 U.S. and corresponding foreign patents and 190 U.S. and corresponding foreign patent applications. We license patents from other parties for certain complementary technologies. We cannot be certain that pending patent applications will result in patents being issued in the United States or foreign countries. In addition, the patents that have been or will be issued may not afford meaningful protection for our technology and products. Competitors may develop products similar to ours that do not conflict with our patents. Pharmaceutical research and development is highly competitive; others may file patents first that cover our products or technology. We are aware of a European patent to which Prosensa has rights that may provide the basis for Prosensa or other parties that have rights to the patent to assert that our drug eteplirsen infringes on such patent. We are currently opposing this patent in the Opposition Division of the European Patent Office and believe that we may be able to invalidate some or all of the claims in this patent. Oral proceedings before the Opposition Division are planned for November 2011; however, because each party will have a right to appeal the Opposition

Division's ruling, a final resolution of this opposition proceeding may take a number of years. Because this opposition is ongoing, the outcome cannot be predicted or determined as of the date of this report. We are also aware of certain claims that will be issued to Prosensa in Japan that may provide the basis for Prosensa or other parties that have rights to these claims to assert that our drug eteplirsen infringes on such claims. We believe we have a basis to invalidate some or all of these claims and are evaluating the potential initiation of invalidation proceedings once these claims issue. Because we have not yet initiated an invalidation proceeding in Japan, the outcome and timing of such proceeding cannot be predicted or determined as of the date of this report. If we are unsuccessful in invalidating some or all of Prosensa's claims in either Europe or Japan, our ability to commercialize both eteplirsen and other therapeutic candidates for our pan-exon strategy could be materially impaired.

Our success will also depend partly on our ability to operate without infringing upon the proprietary rights of others as well as our ability to prevent others from infringing on our proprietary rights. We may be required at times to take legal action to protect our proprietary rights and, despite our best efforts, we may be sued for infringing on the patent rights of others. We have not received any communications or other indications from owners of related patents or others that such persons believe our products or technology may infringe on their patents. Patent litigation is costly and, even if we prevail, the cost of such litigation could adversely affect our financial condition. If we do not prevail, in addition to any damages we might have to pay, we could be required to stop the infringing activity or obtain a license. If any patent related to our products or technology issues, and if our activities are determined to be covered by such a patent, we cannot assure you that we will be able to obtain or maintain a license, which could have a material adverse effect on our business, financial condition, ability to sell our products, operating results and ability to obtain and/or maintain our strategic business relationships.

Others may challenge our patents and, as a result, our patents could be narrowed or invalidated. The patent position of pharmaceutical and biotechnology firms, as well as academia, is generally highly uncertain, involves complex legal and factual questions, and has recently been the subject of much litigation. No consistent policy has emerged from the U.S. Patent and Trademark Office, or USPTO, or the courts regarding the breadth of claims allowed or the degree of protection afforded under biotechnology patents. In addition, there is a substantial backlog of pharmaceutical and biotechnology patent applications at the USPTO and the approval or rejection of patents may take several years.

To help protect our proprietary rights in unpatented trade secrets, we require our employees, consultants and advisors to execute confidentiality agreements and invention assignment agreements. However, such agreements may not provide us with adequate protection if confidential information is used or disclosed improperly. In addition, in some situations these agreements may conflict with, or be subject to, the rights of third parties with whom our employees, consultants or advisors have prior employment or consulting relationships. Further, others may independently develop substantially equivalent proprietary information and techniques, or otherwise gain access to our trade secrets.

Our research collaborators may publish data and information to which we have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations, then our ability to receive patent protection or protect our proprietary information may be impaired.

We face intense competition and rapid technological change, which may result in others discovering, developing or commercializing competing products before or more successfully than we do.

The biotechnology and pharmaceutical industries are highly competitive and subject to significant and rapid technological change. We are aware of many pharmaceutical and biotechnology companies that are actively engaged in research and development in areas related to antisense technology and other RNA technologies or that are developing alternative approaches to or therapeutics for the disease indications on which we are focused. Some of these competitors are developing or testing product candidates that now, or may in the future, compete directly with our product candidates. For example, we believe that companies including Alnylam Pharmaceuticals, Isis Pharmaceuticals, and Santaris share a focus on RNA-based drug discovery and development. Competitors with respect to our exon-skipping DMD program, or eteplirsen, include Prosensa and GlaxoSmithKline, or GSK, and other companies such as Acceleron, Amsterdam Molecular Therapeutics, PTC Therapeutics and Summit plc have also been working on DMD programs.

A European based clinical trial evaluating the systemic administration of the Prosensa/GSK lead DMD drug candidate started several months before the start of our similar clinical trial. Prosensa/GSK also recently announced that the FDA lifted the partial clinical hold on the IND for its lead DMD drug candidate allowing Prosensa/GSK to proceed with longer term clinical studies of its lead DMD drug candidate, including a randomized placebo controlled study in patients in the U.S. The Prosensa/GSK drug candidate may, or may not, prove to be safer or more efficacious than our product candidate and it could gain marketing approval before our product candidate. This might affect our ability to successfully complete a clinical development program or market eteplirsen once approved. This competition may also extend to other exon-skipping drugs for DMD limiting our ability to gain market share. We also face significant competition with respect to our influenza program from many different companies, including large biopharmaceutical companies that have both marketed products like Tamiflu® and other products in various stages of development.

Other potential competitors include large, fully integrated pharmaceutical companies and more established biotechnology companies that have significantly greater resources and expertise in research and development, manufacturing, testing, obtaining regulatory approvals and marketing. Also, academic institutions, government agencies and other public and private research organizations conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and marketing. It is possible that these competitors will succeed in developing technologies that are more effective than our product candidates or that would render our technology obsolete or noncompetitive. Our competitors may, among other things:

- develop safer or more effective products;
- implement more effective approaches to sales and marketing;
- develop less costly products;
- obtain quicker regulatory approval;
- have access to more manufacturing capacity;
- develop products that are more convenient and easier to administer;
- form more advantageous strategic alliances; or
- establish superior proprietary positions.

We may be subject to clinical trial claims and our insurance may not be adequate to cover damages.

We currently have no products that have been approved for commercial sale; however, the current and future use of our product candidates by us and our corporate collaborators in clinical trials, and the sale of any approved products in the future, may expose us to liability claims. These claims might be made directly by consumers or healthcare providers or indirectly by pharmaceutical companies, our corporate collaborators or others selling such products. We may experience financial losses in the future due to product liability claims. We have obtained limited general commercial liability insurance coverage for our clinical trials. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for any of our product candidates. However, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against all losses. If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may not be sufficient to cover such claims and our business operations could be impaired.

Our operations involve the use of hazardous materials, and we must comply with environmental laws, which can be expensive, and may affect our business and operating results.

Our research and development activities involve the use of hazardous materials, including organic and inorganic solvents and reagents. Accordingly, we are subject to federal, state, and local laws and regulations governing the use, storage, handling, manufacturing, exposure to, and disposal of these hazardous materials. In addition, we are subject to environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens, and the handling of biohazardous materials. Although we believe that our activities conform in all material respects with such environmental laws, there can be no assurance that violations of these laws will not occur in the future as a result of human error, accident, equipment failure, or other causes. Liability under environmental, health and safety laws can be joint and several and without regard to fault or negligence. The failure to comply with past, present, or future laws could result in the imposition of substantial fines and penalties, remediation costs, property damage and personal injury claims, loss of permits or a cessation of operations, and any of these events could harm our business and financial conditions. We expect that our operations will be affected by other new environmental and health and workplace safety laws on an ongoing basis, and although we cannot predict the ultimate impact of any such new laws, they may impose greater compliance costs or result in increased risks or penalties, which could harm our business.

Risks Related to Our Common Stock

Provisions of our articles of incorporation, bylaws and Oregon corporate law might deter acquisition bids for us that might be considered favorable and prevent or frustrate any attempt to replace or remove the then current management and board of directors .

Certain provisions of our articles of incorporation and bylaws may make it more difficult for a third party to acquire control of us or effect a change in our board of directors and management. These provisions include:

- classification of our board of directors into two classes, with one class elected each year;
- prohibition of cumulative voting of shares in the election of directors;
- prohibition of shareholder actions by less than unanimous written consent;
- express authorization of the board of directors to make, alter or repeal our bylaws;
- advance notice requirements for nominations for election to our board or for proposing matters that can be acted upon by shareholders at shareholder meetings; and
- the ability of our board of directors to authorize the issuance of undesignated preferred stock, the terms and rights of which may be established and shares of which may be issued without shareholder approval, including rights superior to the rights of the holders of common stock.

In addition, the Oregon Control Share Act and Business Combination Act may limit parties that acquire a significant amount of voting shares from exercising control over us for specific periods of time. These provisions could discourage, delay or prevent a transaction involving a change of control, even if doing so would benefit our shareholders. These provisions also could discourage proxy contests and make it more difficult for shareholders to elect directors of their choosing or cause us to take other corporate actions, such as replacing or removing management or members of our board of directors.

Our stock price is volatile and may fluctuate due to factors beyond our control.

The market prices for, and trading volumes of, securities of biotechnology companies, including our securities, have been historically volatile. The market has from time to time experienced significant price and volume fluctuations unrelated to the operating performance of particular companies. The market price of our common stock may fluctuate significantly due to a variety of factors, including:

- positive or negative results of testing and clinical trials by ourselves, strategic partners, or competitors;
- delays in entering into strategic relationships with respect to development and/or commercialization of our product candidates or entry into strategic relationships on terms that are not deemed to be favorable to our company;
- technological innovations or commercial product introductions by ourselves or competitors;
- changes in government regulations;
- developments concerning proprietary rights, including patents and litigation matters;
- public concern relating to the commercial value or safety of any of our products;
- financing, through the issuance of equity or equity linked securities or incurrence of debt, or other corporate transactions;
- comments by securities analysts;
- litigation;
- the perception that shares of our common stock may be delisted from The NASDAQ Stock Market; or
- general market conditions in our industry or in the economy as a whole.

In addition, the stock market has recently experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of individual companies. Broad market and industry factors may seriously affect the market price of companies' stock, including ours, regardless of actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instigated against these companies. Such litigation, if instigated against us, could result in substantial costs and a diversion of our management's attention and resources.

Our common stock is listed on The NASDAQ Global Market and we may not be able to maintain that listing, which may make it more difficult for investors to sell shares of our common stock.

Our common stock is listed on The NASDAQ Global Market. The NASDAQ Global Market has several quantitative and qualitative requirements with which companies must comply in order to maintain this listing, including a $1.00 minimum bid price per share and $50 million minimum value of listed securities. Our stock price has traded near, and at times below, the $1.00 minimum bid price required for continued listing on NASDAQ. For example, the intraday low trading price for our common stock was $0.77 per share as recently as October 14, 2011. Although NASDAQ in the past has provided relief from the $1.00 minimum bid price requirement as a result of weakness in the stock market, it may not do so in the future. If we fail to maintain compliance with NASDAQ's listing standards, and our common stock becomes ineligible for listing on The NASDAQ Stock Market the liquidity and price of our common stock would be adversely affected.

If our common stock was delisted, the price of our stock and the ability of our shareholders to trade in our stock would be adversely affected. In addition, we would be subject to a number of restrictions regarding the registration of our stock under U.S. federal securities laws, and we would not be able to allow our employees to exercise their outstanding options, which could adversely affect our business and results of operations. If we are delisted in the future from The NASDAQ Global Market, there may be other negative implications, including the potential loss of confidence by actual or potential collaboration partners, suppliers and employees and the loss of institutional investor interest in our company.

We expect our quarterly operating results to fluctuate in future periods, which may adversely affect our business prospects and our stock price.

Our quarterly operating results have fluctuated in the past, and we believe they will continue to do so in the future. Some of these fluctuations may be more pronounced than they were in the past as a result of the issuance of warrants to purchase 29.7 million shares of our common stock by us in December 2007 and January and August 2009. Each of these warrants is classified as a derivative liability. Accordingly, the fair value of the warrants is recorded on our consolidated balance sheet as a liability, and such fair value is adjusted at each financial reporting date with the adjustment to fair value reflected in our consolidated statement of operations. The fair value of the warrants is determined using the Black-Scholes option valuation model. Fluctuations in the assumptions and factors used in the Black-Scholes model can result in adjustments to the fair value of the warrants reflected on our balance sheet and, therefore, our statement of operations. Due to the classification of such warrants and other factors, quarterly results of operations are difficult to forecast, and period-to-period comparisons of our operating results may not be predictive of future performance. Additionally, our quarterly operating results may fluctuate due to the variable nature of our revenue and research and development expenses. Specifically, a change in the timing of activities performed in support of our U.S. government research contracts could either accelerate or defer anticipated revenue from period to period. Likewise, our research and development expenses may experience fluctuations as a result of the timing of activities performed in support of our U.S. government research contracts and the timing and magnitude of expenditures incurred in support of our DMD and other proprietary development programs. In one or more future quarters, our results of operations may fall below the expectations of securities analysts and investors. In that event, the market price of our common stock could decline. In addition, the market price of our common stock may fluctuate or decline regardless of our operating performance.

A significant number of shares of our common stock are issuable pursuant to outstanding options and warrants, and we expect to issue additional shares of common stock in the future. Sales of these shares will dilute the interests of other security holders and may depress the price of our common stock.

As of September 30, 2011, there were 135,743,120 shares of common stock outstanding, vested and expected to vest outstanding options to purchase 14,873,507 shares of common stock, and outstanding warrants to purchase 29,204,857 shares of common stock. Additionally, as of September 30, 2011, there were 11,213,246 shares of common stock available for future issuance under our 2011 Equity Incentive Plan. In addition, we may issue additional common stock and warrants from time to time to finance our operations. We may also issue additional shares to fund potential acquisitions or in connection with additional stock options or other equity awards granted to our employees, officers, directors and consultants under our 2011 Equity Incentive Plan. The issuance of additional shares of common stock or warrants to purchase common stock, perception that such issuances may occur, or exercise of outstanding warrants or options will have a dilutive impact on other shareholders and could have a material negative effect on the market price of our common stock.

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

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. (Removed and Reserved).

Item 5. Other Information.

None.

Item 6. Exhibits.

Exhibit No	Exhibit Description	Incorporated by Reference to Filings Indicated				
		Form	File No.	Exhibit	Filing Date	Filed Herewith
10.1*	Separation Agreement and Release effective July 30, 2011 between J. David Boyle II and AVI BioPharma, Inc.					X
10.2*	Separation and Release Agreement effective August 9, 2011 between Stephen Bevan Shrewsbury, M.D. and AVI BioPharma, Inc.					X
10.3†	Modification No. P00005 to Contract Number W9113M-10-C-0056 between U.S. Army Space and Missile Defense Command and AVI BioPharma, Inc. effective August 15, 2011.					X
10.4	First Amendment to Lease dated August 30, 2011 by and between BMR-3450 Monte Villa Parkway LLC and AVI BioPharma, Inc.					X
31.1	Certification of the Company's President and Chief Executive Officer, Christopher Garabedian, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of the Company's Vice President, Finance, Michael Jacobsen, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Certification of the Company's President and Chief Executive Officer, Christopher Garabedian, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2	Certification of the Company's Vice President, Finance, Michael Jacobsen, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS**	XBRL Instance Document.					X
101.SCH**	XBRL Taxonomy Extension Schema Document.					X
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document.					X

† Portions of this exhibit are omitted and were filed separately with the Securities and Exchange Commission pursuant to an application requesting confidential treatment.

* Indicates management contract or compensatory plan, contract or arrangement.

** In accordance with Rule 406T of Regulation S-T, the information in these exhibits is furnished and deemed not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of Section 18 of the Exchange Act of 1934, and otherwise is not subject to liability under these sections and shall not be incorporated by reference into any registration statement or other document filed under the Securities Act of 1933, as amended, except as expressly set forth by specific reference in such filing.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

AVI BIOPHARMA, INC.

Date: November 8, 2011

By: /s/ CHRISTOPHER GARABEDIAN
Christopher Garabedian
President and Chief Executive Officer

EXHIBIT INDEX

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Exhibit 10.1

SEPARATION AGREEMENT AND RELEASE

This Separation Agreement and Release ("Agreement") is made by and between J. David Boyle II ("Employee") and AVI BioPharma, Inc. (the "Company") (collectively referred to as the "Parties" or individually referred to as a "Party").

RECITALS

WHEREAS, Employee was employed by the Company;

WHEREAS, Employee signed an Employment Agreement dated July 24, 2008, as amended, which shall expire effective July 24, 2011 (the "Employment Agreement") and a Confidential Proprietary Rights and Non-Disclosure Agreement with the Company dated September 25, 2009 (the "Confidentiality Agreement");

WHEREAS, the Company and Employee have entered into five Notices of Grant of Stock Options and Option Agreements, effective August 18, 2008 ("Option 1"), February 10, 2009 ("Option 2"), February 9, 2010 ("Option 3"), March 9, 2010 ("Option 4") and April 20, 2010 ("Option 5") (collectively, the "Option Agreements"), granting Employee the option to purchase shares of the Company's common stock subject to the terms and conditions of the Company's 2002 Equity Incentive Plan and the Option Agreements (collectively the "Stock Agreements");

WHEREAS, Employee's last day of employment with the Company shall be July 24, 2011 (the "Separation Date"); and

WHEREAS, the Parties wish to resolve any and all disputes, claims, complaints, grievances, charges, actions, petitions, and demands that the Employee may have against the Company and any of the Releasees as defined below, including, but not limited to, any and all claims arising out of or in any way related to Employee's employment with or separation from the Company;

NOW, THEREFORE, in consideration of the mutual promises made herein, the Company and Employee hereby agree as follows:

COVENANTS

1. Consideration. Subject to the Agreement being effective and irrevocable, the Company agrees (a) to pay Employee One Hundred Thirteen Thousand Five Hundred Six Dollars and 68/100 ($113,506.68) less legally required and authorized withholdings, with such payment to be made no later than September 1, 2011; (b) to release Employee from the post-employment, non-competition obligations set forth in Section 7(a) of the Employment Agreement; (c) to accelerate the vesting of Option 1, such that the shares underlying Option 1 will be fully vested and exercisable as of the Separation Date (the "Acceleration"), and (d) to extend the post-termination exercise period for all of the Option Agreements, such that the shares underlying such option awards that are vested as of the Separation Date will remain exercisable until 1:00 p.m., Pacific time, on December 30, 2011; provided, however, that in no event shall the extension of the post-termination exercise period have a duration beyond (i) the original termination date of each option or (ii) the 10-year anniversary of each option's grant date (the "Exercise Extension"). Employee acknowledges and agrees that the consideration provided to him hereunder fully satisfies any obligation that the Company had to pay Employee wages or any other compensation for any of the services that Employee rendered to the Company.

2. Stock. The Parties agree that for purposes of determining the number of shares of the Company's common stock that Employee is entitled to purchase from the Company, pursuant to the exercise of outstanding options, Employee will be considered to have vested only up to the Separation Date, including the accelerated vesting of Option 1 as provided herein. Employee acknowledges that as of the Separation Date and after giving effect to the Acceleration, Employee will have vested in 350,000 shares subject to Option 1, 100,000 shares subject to Option 2, 60,000 shares subject to Option 3, 33,333 shares subject to Option 4 and 50,000 shares subject to Option 5 and no more. The exercise of Employee's vested options and shares shall continue to be governed by the terms and conditions of the Company's Stock Agreements, as modified by the Exercise Extension.

3. Benefits. Employee's health insurance benefits shall cease on the last day of July 2011, subject to Employee's right to continue his health insurance under COBRA. Employee's participation in all benefits and incidents of employment, including, but not limited to, vesting in stock options, and the accrual of bonuses, vacation, and paid time off, ceased as of the Separation Date.

4. Payment of Salary and Receipt of All Benefits . Employee acknowledges and represents that, other than the consideration set forth in this Agreement, accrued salary in the final pay period of Employee's employment through July 24, 2011, and pay for Employee's accrued and unused PTO, which Employee believes to be 83.68 hours, the Company has paid or provided all salary, wages, bonuses, accrued vacation/paid time off, leave, housing allowances, relocation costs, interest, severance, outplacement costs, fees, reimbursable expenses, commissions, stock, stock options, vesting, and any and all other benefits and compensation due to Employee. Employee further acknowledges and represents that he has received any leave to which he was entitled or which he requested, if any, under the Family Medical Leave Act, and that he did not sustain any workplace injury, during his employment with the Company.

5. Release of Claims. Employee agrees that the foregoing consideration represents settlement in full of all outstanding obligations owed to Employee by the Company and its current and former officers, directors, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, insurers, divisions, and subsidiaries, and predecessor and successor corporations and assigns (collectively, the "Releasees"). Employee, on his own behalf and on behalf of his respective heirs, family members, executors, agents, and assigns, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Employee may possess against any of the Releasees arising from any omissions, acts, facts, or damages that have occurred up until and including the Effective Date of this Agreement, including, without limitation:

a. any and all claims relating to or arising from Employee's employment relationship with the Company and the termination of that relationship;

b. any and all claims relating to, or arising from, Employee's right to purchase, or actual purchase of shares of stock of the Company, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law;

c. any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

d. any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Labor Standards Act, except as prohibited by law; the Fair Credit Reporting Act; the Age Discrimination in Employment Act of 1967; the Older Workers Benefit Protection Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act, except as prohibited by law; the Sarbanes-Oxley Act of 2002; any of the laws of the state of Washington, including, but not limited to, RCW 49 *et seq*, except as prohibited by law; and any of the laws of the state of Oregon (or any other applicable jurisdiction) that are subject to release, including any and all amendments thereto and regulations thereunder;

e. any and all claims for violation of the federal or any state constitution;

f. any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

g. any claim for any loss, cost, damage, or expense arising out of any dispute over the non-withholding or other tax treatment of any of the proceeds received by Employee as a result of this Agreement; and

h. any and all claims for attorneys' fees and costs.

Employee agrees that the release set forth in this section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under this Agreement. This release does not release claims that cannot be released as a matter of law, including, but not limited to, Employee's right to file a charge with or participate in a charge by the Equal Employment Opportunity Commission, or any other local, state, or federal administrative body or government agency that is authorized to enforce or administer laws related to employment, against the Company (with the understanding that any such filing or participation does not give Employee the right to recover any monetary damages against the Company; Employee's release of claims herein bars Employee from recovering such monetary relief from the Company). Notwithstanding the foregoing, Employee's release of claims does not extinguish or diminish Employee's right to defense and/or indemnification as to claims or causes of

action asserted against Employee arising from his employment as an officer of the Company to the extent such right exists under the Indemnification Agreement between Employee and the Company, dated October 4, 2010, the Company's Articles of Incorporation, By-laws, or applicable law.

Except for claims or causes of action against Employee for which Employee would not be entitled to indemnification and defense under the Indemnification Agreement between Employee and the Company, dated October 4, 2010, the Company's Articles of Incorporation, By-laws, or applicable law if brought by a third party, the Company and its successors and assigns hereby and forever release Employee, and his respective heirs, family members, executors, agents, and assigns ("Employee Releasees") from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that the Company may possess against any of the Employee Releasees arising from any omissions, acts, facts, or damages that have occurred up until and including the Effective Date of this Agreement, including, without limitation:

a. any and all claims relating to or arising from Employee's employment relationship with the Company and the termination of that relationship; and

b. any and all claims for attorneys' fees and costs.

The Company and Employee agree that the releases set forth in this Section 5 shall be and remain in effect in all respects as complete general releases as to the matters released. These releases do not extend to any obligations incurred under this Agreement.

6. Acknowledgment of Waiver of Claims under ADEA. Employee understands and acknowledges that he is waiving and releasing any rights he may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Employee understands and agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the Effective Date of this Agreement. Employee understands and acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Employee was already entitled. Employee further understands and acknowledges that he has been advised by this writing that: (a) he should consult with an attorney prior to executing this Agreement; (b) he has twenty-one (21) days within which to consider this Agreement; (c) he has seven (7) days following his execution of this Agreement to revoke this Agreement; (d) this Agreement shall not be effective until after the revocation period has expired; and (e) nothing in this Agreement prevents or precludes Employee from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Employee signs this Agreement and returns it to the Company in less than the 21-day period identified above, Employee hereby acknowledges that he has freely and voluntarily chosen to waive the time period allotted for considering this Agreement. The Parties agree that any changes made in the course of negotiating the terms of this Agreement will not restart the running of the 21-day period.

7. Unknown Claims. Employee acknowledges that he has been advised to consult with legal counsel and that he is familiar with the principle that a general release does not extend to claims

that the releaser does not know or suspect to exist in his favor at the time of executing the release, which, if known by him, must have materially affected his settlement with the releasee. Employee, being aware of said principle, agrees to expressly waive any rights he may have to that effect, as well as under any other statute or common law principles of similar effect, except as to such claims as are expressly reserved by the Employee in Section 5 above. The Company acknowledges that it has consulted with legal counsel and that it is familiar with the principle that a general release does not extend to claims that the releaser does not know or suspect to exist in his favor at the time of executing the release, which, if known by him, must have materially affected his settlement with the releasee. The Company, being aware of said principle, agrees to expressly waive any rights it may have to that effect, as well as under any other statute or common law principles of similar effect, except as to such claims as are expressly reserved by the Company in Section 5 above.

8. No Pending or Future Lawsuits. Employee represents that he has no lawsuits, claims, or actions pending in his name, or on behalf of any other person or entity, against the Company or any of the other Releasees. Employee also represents that he does not intend to bring any claims on his own behalf or on behalf of any other person or entity against the Company or any of the other Releasees. The Company represents that it has no lawsuits, claims, or actions pending in its name, or on behalf of any other person or entity, against the Employee or any of the other Employee Releasees. The Company also represents that it does not intend to bring any claims on its own behalf or on behalf of any other person or entity against the Employee or any of the other Employee Releasees.

9. Application for Employment. Employee understands and agrees that, as a condition of this Agreement, Employee shall not be entitled to any employment with the Company, and Employee hereby waives any right, or alleged right, of employment or re-employment with the Company.

10. Confidentiality. Employee agrees to maintain in complete confidence the existence of this Agreement, the contents and terms of this Agreement, and the consideration for this Agreement (hereinafter collectively referred to as "Separation Information"). Except as required by law, Employee may disclose Separation Information only to his immediate family members, the Court in any proceedings to enforce the terms of this Agreement, Employee's undersigned counsel, and Employee's accountant and any professional tax advisor to the extent that they need to know the Separation Information in order to provide advice on tax treatment or to prepare tax returns, and must prevent disclosure of any Separation Information to all other third parties. Employee agrees that he will not publicize, directly or indirectly, any Separation Information.

Employee acknowledges and agrees that the confidentiality of the Separation Information is of the essence. The Parties agree that if the Company proves that Employee breached this Confidentiality provision, the Company shall be entitled to an award of its costs spent enforcing this provision, including all reasonable attorneys' fees associated with the enforcement action, without regard to whether the Company can establish actual damages from Employee's breach, except to the extent that such breach constitutes a legal action by Employee that directly pertains to the ADEA. Any such individual breach or disclosure shall not excuse Employee from his obligations hereunder, nor permit him to make additional disclosures. Employee warrants that he has not disclosed, orally or in writing, directly or indirectly, any of the Separation Information to any unauthorized party.

11. Trade Secrets and Confidential Information/Company Property. Employee reaffirms and agrees to observe and abide by the terms of the Confidentiality Agreement, specifically including the provisions therein regarding nondisclosure of the Company's trade secrets and confidential and proprietary information, and non-solicitation of Company employees. Employee's signature below constitutes his certification under penalty of perjury that he has returned all documents and other items provided to Employee by the Company, developed or obtained by Employee in connection with his employment with the Company, or otherwise belonging to the Company.

12. No Cooperation. Employee agrees that he will not knowingly encourage, counsel, or assist any attorneys or their clients in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints by any third party against any of the Releasees, unless under a subpoena or other court order to do so or as related directly to any ADEA waiver in this Agreement. Employee agrees both to immediately notify the Company upon receipt of any such subpoena or court order, and to furnish, within three (3) business days of its receipt, a copy of such subpoena or other court order. If approached by anyone for counsel or assistance in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints against any of the Releasees, Employee shall state no more than that he cannot provide counsel or assistance.

13. Non-Disparagement. Employee agrees to refrain from any disparagement, defamation, libel, or slander of any of the Releasees, and agrees to refrain from any tortious interference with the contracts and relationships of any of the Releasees. Employee shall direct any inquiries by potential future employers to the Company's human resources department, which shall use its best efforts to provide only the Employee's last position and dates of employment, and which shall in all cases comply with the Company's obligations in this Section. The Company agrees that its executive officers and directors, so long as they remain affiliated with the Company, will refrain from any disparagement, defamation, libel, or slander of the Employee, and will refrain from any tortious interference with the contracts and relationships of Employee.

14. Breach. Employee acknowledges and agrees that any material breach of this Agreement, unless such breach constitutes a legal action by Employee challenging or seeking a determination in good faith of the validity of any waiver herein under the ADEA, or of any provision of the Confidentiality Agreement shall entitle the Company immediately to recover and/or cease providing the consideration provided to Employee under this Agreement, except as provided by law.

15. No Admission of Liability. Each party understands and acknowledges that this Agreement constitutes a compromise and settlement of any and all actual or potential disputed claims by Employee and the Company. No action taken by the Company or the Employee hereto, either previously or in connection with this Agreement, shall be deemed or construed to be (a) an admission of the truth or falsity of any actual or potential claims or (b) an acknowledgment or admission by either party of any fault or liability whatsoever to the other or to any third party.

16. Non-Solicitation. Employee agrees that for a period of twelve (12) months immediately following the Effective Date of this Agreement, Employee shall not directly or indirectly solicit any of the Company's employees to leave their employment at the Company.

17. Costs. The Parties shall each bear their own costs, attorneys' fees, and other fees incurred in connection with the preparation of this Agreement.

18. ARBITRATION. THE PARTIES AGREE THAT ANY AND ALL DISPUTES ARISING OUT OF THE TERMS OF THIS AGREEMENT, THEIR INTERPRETATION, AND ANY OF THE MATTERS HEREIN RELEASED, SHALL BE SUBJECT TO ARBITRATION IN KING COUNTY, WASHINGTON, BEFORE JUDICIAL ARBITRATION & MEDIATION SERVICES, INC. ("JAMS"), PURSUANT TO ITS EMPLOYMENT ARBITRATION RULES & PROCEDURES ("JAMS RULES"). THE ARBITRATOR MAY GRANT INJUNCTIONS AND OTHER RELIEF IN SUCH DISPUTES. THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN ACCORDANCE WITH WASHINGTON LAW, AND THE ARBITRATOR SHALL APPLY SUBSTANTIVE AND PROCEDURAL WASHINGTON LAW TO ANY DISPUTE OR CLAIM, WITHOUT REFERENCE TO ANY CONFLICT-OF-LAW PROVISIONS OF ANY JURISDICTION. TO THE EXTENT THAT THE JAMS RULES CONFLICT WITH WASHINGTON LAW, WASHINGTON LAW SHALL TAKE PRECEDENCE. THE DECISION OF THE ARBITRATOR SHALL BE FINAL, CONCLUSIVE, AND BINDING ON THE PARTIES TO THE ARBITRATION. THE PARTIES AGREE THAT THE PREVAILING PARTY IN ANY ARBITRATION SHALL BE ENTITLED TO INJUNCTIVE RELIEF IN ANY COURT OF COMPETENT JURISDICTION TO ENFORCE THE ARBITRATION AWARD. THE PARTIES TO THE ARBITRATION SHALL EACH PAY AN EQUAL SHARE OF THE COSTS AND EXPENSES OF SUCH ARBITRATION, AND EACH PARTY SHALL SEPARATELY PAY FOR ITS RESPECTIVE COUNSEL FEES AND EXPENSES; PROVIDED, HOWEVER, THAT THE ARBITRATOR SHALL AWARD ATTORNEYS' FEES AND COSTS, INCLUDING THE ARBITRATOR'S FEES, TO THE PREVAILING PARTY, EXCEPT AS PROHIBITED BY LAW. THE PARTIES HEREBY AGREE TO WAIVE THEIR RIGHT TO HAVE ANY DISPUTE BETWEEN THEM RESOLVED IN A COURT OF LAW BY A JUDGE OR JURY. NOTWITHSTANDING THE FOREGOING, THIS SECTION WILL NOT PREVENT EITHER PARTY FROM SEEKING INJUNCTIVE RELIEF (OR ANY OTHER PROVISIONAL REMEDY) FROM ANY COURT HAVING JURISDICTION OVER THE PARTIES AND THE SUBJECT MATTER OF THEIR DISPUTE RELATING TO THIS AGREEMENT AND THE AGREEMENTS INCORPORATED HEREIN BY REFERENCE. SHOULD ANY PART OF THE ARBITRATION AGREEMENT CONTAINED IN THIS PARAGRAPH CONFLICT WITH ANY OTHER ARBITRATION AGREEMENT BETWEEN THE PARTIES, THE PARTIES AGREE THAT THIS ARBITRATION AGREEMENT SHALL GOVERN.

19. Tax Consequences. The Company makes no representations or warranties with respect to the tax consequences of the payments and any other consideration provided to Employee or made on his behalf under the terms of this Agreement. Employee agrees and understands that he is responsible for payment, if any, of local, state, and/or federal taxes on the payments and any other consideration provided hereunder by the Company and any penalties or assessments thereon. Employee further agrees to indemnify and hold the Company harmless from any claims, demands, deficiencies, penalties, interest, assessments, executions, judgments, or recoveries by any government agency against the Company for any amounts claimed due on account of (a) Employee's failure to pay or the Company's failure to withhold, or Employee's delayed payment of, federal or state taxes, or (b) damages sustained by the Company by reason of any such claims, including attorneys' fees and costs.

20. Section 409A. This Agreement is intended to be exempt from, or comply with, Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), and the final Treasury Regulations and official IRS guidance thereunder (collectively, "Section 409A"). All ambiguities and/or ambiguous terms shall be interpreted to be exempt from, or comply with, Section 409A.

21. Authority. The Company represents and warrants that the undersigned has the authority to act on behalf of the Company and to bind the Company and all who may claim through it to the terms and conditions of this Agreement. Employee represents and warrants that he has the capacity to act on his own behalf and on behalf of all who might claim through him to bind them to the terms and conditions of this Agreement. Each Party warrants and represents that there are no liens or claims of lien or assignments in law or equity or otherwise of or against any of the claims or causes of action released herein.

22. No Representations. Employee represents that he has had an opportunity to consult with an attorney, and has carefully read and understands the scope and effect of the provisions of this Agreement. Employee has not relied upon any representations or statements made by the Company that are not specifically set forth in this Agreement.

23. Severability. In the event that any provision or any portion of any provision hereof or any surviving agreement made a part hereof becomes or is declared by a court of competent jurisdiction or arbitrator to be illegal, unenforceable, or void, this Agreement shall continue in full force and effect without said provision or portion of provision.

24. Attorneys' Fees. Except with regard to a legal action challenging or seeking a determination in good faith of the validity of any waiver herein under the ADEA, in the event that either Party brings an action to enforce or effect its rights under this Agreement, the prevailing Party shall be entitled to recover its costs and expenses, including the costs of mediation, arbitration, litigation, court fees, and reasonable attorneys' fees incurred in connection with such an action.

25. Entire Agreement. This Agreement represents the entire agreement and understanding between the Company and Employee concerning the subject matter of this Agreement and Employee's employment with and separation from the Company and the events leading thereto and associated therewith, and supersedes and replaces any and all prior agreements and understandings concerning the subject matter of this Agreement and Employee's relationship with the Company, with the exception of the Confidentiality Agreement and the Stock Agreements.

26. No Oral Modification. This Agreement may only be amended in a writing signed by Employee and the Company's Chief Executive Officer.

27. Governing Law. This Agreement shall be governed by the laws of the State of Washington, without regard for choice-of-law provisions. Employee consents to personal and exclusive jurisdiction and venue in the State of Washington.

28. Effective Date. Each Party has seven (7) days after that Party signs this Agreement to revoke it. This Agreement will become effective on the eighth (8th) day after Employee signed this Agreement, so long as it has been signed by the Parties and has not been revoked by either Party before that date (the "Effective Date").

29. Expiration of Agreement. This Agreement is executable until 5:00 p.m., PDT, on August 3, 2011 (the "Expiration Time"). This Agreement is null & void if the Company has not received a copy of the Agreement executed by the Employee on or before the Expiration Time.

30. Counterparts. This Agreement may be executed in counterparts and by facsimile, and each counterpart and facsimile shall have the same force and effect as an original and shall constitute an effective, binding agreement on the part of each of the undersigned.

31. Voluntary Execution of Agreement. Employee understands and agrees that he executed this Agreement voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of his claims against the Company and any of the other Releasees. Employee acknowledges that:

(a) He has read this Agreement;

(b) He has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of his own choice or has elected not to retain legal counsel;

(c) He understands the terms and consequences of this Agreement and of the releases it contains; and

(d) He is fully aware of the legal and binding effect of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the respective dates set forth below.

J. DAVID BOYLE II, an individual

Dated: July 22, 2011

/s/ J. David Boyle II
J. David Boyle II

AVI BIOPHARMA, INC.

Dated: July 24, 2011

By /s/ Christopher Garabedian
Name: Christopher Garabedian
Title: President and Chief Executive Officer

Exhibit 10.2

SEPARATION AND RELEASE AGREEMENT

THIS SEPARATION AND RELEASE AGREEMENT ("Agreement") is between Stephen Bevan Shrewsbury, M.D. ("Employee") and AVI BioPharma, Inc. ("Employer"), and is effective eight (8) days after Employee signs this Agreement (" Effective Date").

The parties agree as follows:

1. **Separation from Employment**. Employee separated from employment with Employer effective August 1, 2011 (the " Separation Date"). Employee acknowledges and agrees that he has been paid his salary and other compensation through the Separation Date, less all lawful or required deductions.

2. **Consideration**. In consideration of Employee's agreements hereunder, Employer shall pay to Employee the amounts set forth and described in Section 13(c)(i) of that certain Employment Agreement dated effective the 26th day of January, 2009, as amended on October 16, 2009 (the "Employment Agreement").

3. **Return of Employer Property**. Employee represents that he has returned all Employer property in his possession or under his control, including but not limited to keys, credit cards, files, laptop computer and any and all Employer documents.

4. **Confidentiality**. The parties will use reasonable efforts to keep the terms of this Agreement confidential. Employee may disclose the terms of this Agreement to his immediate family. Employer may disclose the terms of this Agreement to its officers and managers and as required by law (including, but not limited to, to comply with the rules and regulations promulgated by the U.S. Securities and Exchange Commission). Either party may disclose the terms of this Agreement to their respective attorneys, accountants, financial advisors, auditors, or similar advisors, or in response to government requests. Third persons informed of the terms of this Agreement shall in turn be advised of this confidentiality provision and requested to maintain such confidentiality.

5. **Release**.

5.1 In exchange for the consideration paid to Employee as set forth in this Agreement, Employee forever releases and discharges Employer, any of Employer-sponsored employee benefit plans in which Employee participates, or was participating in, (collectively the " Plans") and all of their respective officers, members, managers, partners, directors, trustees, agents, employees, and all of their successors and assigns (collectively " Releasees") from any and all claims, actions, causes of action, rights, or damages, including costs and attorneys' fees (collectively " Claims") which Employee may have arising out of his employment (including Claims that may arise out of Employee's Employment Agreement), on behalf of himself, known, unknown, or later discovered which arose prior to the date Employee signs this Agreement. This release includes but is not limited to, any Claims under any local, state, or federal laws prohibiting discrimination in employment, including without limitation the federal civil rights acts, Oregon Revised Statutes Chapter 659A, the Americans with Disabilities Act, the Age Discrimination in Employment Act, or

Claims under the Employee Retirement Income Security Act, or Claims alleging any legal restriction on Employer's right to terminate its employees, any Claims Employee has relating to his rights to or against any of the Plans, or personal injury Claims, including without limitation wrongful discharge, breach of contract, defamation, tortious interference with business expectancy, constructive discharge, or infliction of emotional distress. Employee represents that he has not filed any Claim against Employer or its Releasees, he has no knowledge of any facts that would support any Claim by Employee against Employer or by a third party against Employer, and that he will not file a Claim at any time in the future concerning Claims released in this Agreement; provided, however, that this will not limit Employee from filing a Claim to enforce the terms of this Agreement. Notwithstanding the foregoing, nothing herein shall constitute release of any of Employee's rights relating to vested options, vested benefits or vested entitlements under the Company's employee benefits plans, including equity incentive and retirement plans.

5.2 In consideration of the promises of Employee as set forth herein, Employer does hereby, and for its successors and assigns, release, acquit and forever discharge Employee from any and all actions, causes of action, obligations, costs, expenses, damages, losses, claims, liabilities, suits, debts, and demands (including attorneys' fees and costs actually incurred), of whatever character in law or in equity known or unknown, suspected or unsuspected, from the beginning of time to the date of execution hereof

6 **Non-disparagement**. Employee and Employer each agree not to make disparaging statements about each other, except in the case of Employer statements that are required under applicable federal or state securities laws or applicable rules and regulations of any exchange on which Employer's stock is traded; provided, further that Employer's obligations pursuant to this Section shall apply only with regard to Employer's officers and directors and only for so long as they are employees or directors of Employer.

7 **Consideration and Revocation Periods**. Employee understands and acknowledges that he is waiving and releasing any rights he may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Employee understands and agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the Effective Date of this Agreement. Employee understands and acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Employee was already entitled. Employee further understands and acknowledges that he has been advised by this writing that: (a) he should consult with an attorney prior to executing this Agreement; (b) he has twenty-one (21) days within which to consider this Agreement; (c) he has seven (7) days following his execution of this Agreement to revoke this Agreement; (d) this Agreement shall not be effective until after the revocation period has expired; and (e) nothing in this Agreement prevents or precludes Employee from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Employee signs this Agreement and returns it to the Company in less than the 21-day period identified above, Employee hereby acknowledges that he has freely and voluntarily chosen to waive the time period allotted for considering this Agreement. The Parties agree that any changes made in the course of negotiating the terms of this Agreement will not restart the running of the 21-day period.

8 **No Liability**. This Agreement shall not be construed as an admission by either party that it acted wrongfully with respect to the other.

9 **Severability**. If any of the provisions of this Agreement are held to be invalid or unenforceable, the remaining provisions will nevertheless continue to be valid and enforceable.

10 **Entire Agreement**. This Agreement, together with any surviving provisions of the Confidential Proprietary Rights and Non-Disclosure Agreement Employee entered into with the Company on September 17, 2009, any equity agreements, and any surviving provisions of the Employment Agreement, represent and contain the entire understanding between the parties in connection with its subject matter. Except as referenced herein, all other prior written or oral agreements or understandings are merged into and superseded by this Agreement. Employee acknowledges that in signing this Agreement, he has not relied upon any representation or statement not set forth in this Agreement made by Employer or any of its representatives.

11 **Attorney Fees**. If any suit or action is filed by either party to enforce this Agreement or otherwise with respect to the subject matter hereof, the prevailing party shall be entitled to recover reasonable attorney fees incurred in preparation or in prosecution or defense of such suit or action as fixed by the trial court, and if any appeal is taken from the decision of the trial court, reasonable attorney fees as fixed by the appellate court.

12 **Choice of Law**. This Agreement is made and shall be construed and performed under the laws of the State of Oregon.

PLEASE READ CAREFULLY. THIS AGREEMENT INCLUDES A RELEASE OF CERTAIN KNOWN OR UNKNOWN CLAIMS.

(*Signature Page Follows*)

STEPHEN SHREWSBURY, M.D., an individual

Dated: August 1, 2011

/s/ Stephen Shrewsbury
Stephen Shrewsbury, M.D.

AVI BIOPHARMA, INC.

Dated: August 1, 2011

By /s/ Christopher Garabedian
Name: Christopher Garabedian
Title: President and Chief Executive Officer

[***Signature Page to Separation and Release Agreement***]

Exhibit 10.3

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE V	PAGE OF PAGES 1 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00005	08/15/2011	see schedule	

6. ISSUED BY CODE	W911QY	7. ADMINISTERED BY *(If other than Item 6)* CODE	S4801A
NATICK CONTRACTING DIVISION 64 Thomas Johnson Drive Frederick MD 21702-4300		DCMA DCMA-SEATTLE CORPORATE CAMPUS EAST III 3009 112TH AVE. NE STE200 BELLEVUE WA 98004-8019	

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*	(X)	9A. AMENDMENT OF SOLICIATION NO.
AVI BIOPHARMA INC 4575 SW RESEARCH WAY STE 200 CORVALLIS OR 97333-1299	☐	9B. DATED *(SEE ITEM 11)*
	☒	10A. MODIFICATION OF CONTRACT/ORDER NO. W9113M-10-C-0056
CODE 49WU1 FACILITY CODE		10B. Dated *(SEE ITEM 13)* Jul 14, 2010

11.THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing items 8 and 15, and returning copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted;

or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPIRATION DATA *(If required)*

See SCHEDULE

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
☐	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
☐	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.*) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
☒	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PRUSUANT TO AUTHORITY OF: Mutual Agreement of Both Parties
☒	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (*Organized by UCF section headings, including solicitation/contract subject matter where feasible.*)

See Attached Summary of Changes.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Chris Garabedian President and CEO	Sandra J. O'Connell Contracting Officer

15B. CONTRACTOR/OPERATOR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Chris Garabedian *(Signature of person authorized to sign)*	9/23/11	/s/ Sandra J. O'Connell *(Signature of Contracting Officer)*	9/26/11

NSN 7540-01-152-8070 STANDARD FORM 30 (Rev. 10-83)
Previous edition unusable Prescribed by GSA FAR (48 CFR) 53.243

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

A. The purpose of this modification is to move studies/tasks originally planned in Option CLINs 0002 and 0006 into CLINs 0001 and 0005 thereby affecting the total cost and schedule of this contract as shown below.

1. SECTION A—SOLICITATION/CONTRACT FORM

The total cost of this contract was increased by $46,142,707.00 from $80,396,827.37 to $126,539,534.37.

2. SECTION B—SUPPLIES OR SERVICES AND PRICES

CLIN 0001

The target cost has increased by $[†] from $[†] to $[†].
The target profit/fee has increased by $[†] from $[†] to $[†].
The minimum profit fee has increased by $[†] from $[†] to $[†].
The maximum profit fee has increased by $[†] from $[†] to $[†].
The total cost of this line item has increased by $[†] from $[†] to $[†].

CLIN 0002

The target cost has decreased by $[†] from $[†] to $[†].
The target profit/fee has decreased by $[†] from $[†] to $[†].
The minimum profit fee has decreased by $[†] from $[†] to $[†].
The maximum profit fee has decreased by $[†] from $[†] to $[†].
The total cost of this line item has decreased by $[†] from $[†] to $[†].

CLIN 0005

The target cost has increased by $[†] from $[†] to $[†].
The target profit/fee has increased by $[†] from $[†] to $[†].
The minimum profit fee has increased by $[†] from $[†] to $[†].
The maximum profit fee has increased by $[†] from $[†] to $[†].
The total cost of this line item has increased by $[†] from $[†] to $[†].

CLIN 0006

The target cost has decreased by $[†] from $[†] to $[†].
The target profit/fee has decreased by $[†] from $[†] to $[†].
The minimum profit fee has decreased by $[†] from $[†] to $[†].
The maximum profit fee has decreased by $[†] from $[†] to $[†].
The total cost of this line item has decreased by $[†] from $[†] to $[†].

3. SECTION F - DELIVERIES OR PERFORMANCE

The following Delivery Schedule item for CLIN 0001 has been changed from:

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
25-MAR-2012		N/A FOB: Destination	

To:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
18-APR-2013		N/A FOB: Destination	

The following Delivery Schedule item for CLIN 0005 has been changed from:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
01-APR-2012		N/A FOB: Destination	

To:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
10-MAY-2013		N/A FOB: Destination	

4. SECTION J — LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

Attachment No. 1 Contractor's Statement of Work — Ebola Virus, Dated 3/11/10 and Attachment No. 2 Contractor's Statement of Work — Marburg Virus, Dated 3/11/10 are replaced in their entirety with the Attachments to this modification.

B. An Integrated Baseline Review (IBR) will be held within 3 months of the date of this modification. At that time the Performance Measurement Baseline (PMB) will be approved by the Government for the changed efforts of CLINs 0001; 0002, 0005 and 0006. A modification will be executed upon acceptance of the PMB, and will incorporate any approved changes to the budget that are required.

C. As a result of this modification all other terms and conditions of this contract are unchanged and remain in full force and effect.

(End of Summary of Changes)

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Appendix B: Revised Statement of Work

3.0 CONTRACT

AVI BioPharma (AVI) Statement of Work for AVI-6002 as an effective therapeutic for ebolavirus:

3.2 CLIN0001 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.2.1 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.2.2.1.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: [†]

3.2.2.1.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.2.1.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.2.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.2.2.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.2.2.2 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.3 [†]: [†]

[†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.3.1 [†]: [†].

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.3.1.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.3.1.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.3.1.3 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

[†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.2.3.1.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.3.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.3.2.1 [†]: [†]

Period of Work: **[†]**

Deliverable: **[†]**.

3.2.3.2.2 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**

3.2.3.2.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.2.3.2.4 [†]: [†]

Period of Work: **[†]**

Deliverable: **[†]**

3.2.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.2.4.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†].**

3.2.4.1.1 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.1.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.1.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: [†].

3.2.4.1.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.1.5 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**.

3.2.4.2 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†].**

Deliverable: **[†]**.

3.2.4.2.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.2.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.2.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.2.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.2.5 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.2.4.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.3.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.3.2 [†]: [†]

Period of Work: [†]

Deliverable: **[†]**

3.2.4.3.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.4.3.4 [†]: [†]

Period of Work: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: **[†]**

3.2.4.3.5 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.5 [†]: [†]

Period of Work: **[†]**

Deliverable: **[†]**

3.2.5.1 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**.

3.2.5.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.2.5.3 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.2.5.4 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.2.5.5 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.2.5.6 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.2.5.7 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.2.5.8 [†]: [†]

Period of Work: **[†].**

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: **[†]**

3.2.5.9 [†]: [†].

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.6 [†]: [†]

[†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.6.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.6.2 [†]: [†]

Period of Work: **[†]**.

Deliverable:. **[†]**

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.2.6.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.7 [†]: [†]

[†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.7.1 [†]: [†].

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.7.2 Finance and EVMS: [†].

Period of Work: **[†]**.

Deliverable: **[†]**.

3.2.7.3 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**

3.2.7.4 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3 [†]: [†]

[†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.1 [†]:[†]

[†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.3.1.1 [†]: [†]

Period of Work: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: **[†]**

3.3.1.2 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**.

3.3.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.3.2.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

[†]

3.3.2.1.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.2.1.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.2.1.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.2.1.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.2.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.2.2.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.2.2.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.2.2.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.2.2.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.2.2.5 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.2.2.6 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**.

3.3.2.3 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†].

Deliverable: [†].

3.3.2.3.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.3.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.5 [†]: [†]

Period of Work: [†].

Deliverable: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.2.6 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.3.3 [†]: [†]

Period of Work: **[†]**.

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3.3.3.1 [†]: [†]

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3.3.3.2 [†]: [†]

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3.3.3.3 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.4. [†]: [†]

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3.3.4.1 [†]: [†]

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3.3.4.2 [†]: [†]

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3.3.4.3 [†]: [†]

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3.3.4.4 [†]: [†]

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3.3.4.5 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

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3.3.4.6 [†]: [†]

Period of Work: **[†]**.

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3.3.5.1 [†]: [†]

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3.3.5.2 [†]: [†]

Period of Work: **[†]**.

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3.3.5.3 [†]: [†]

Period of Work: **[†]**

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3.3.6 [†]: [†]

Period of Work: **[†]**.

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3.3.6.1 [†]: [†]

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3.3.6.3 [†]: [†]

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3.3.7 [†]: [†]

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3.3.7.1 [†]: [†]

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3.3.7.2 [†]: [†]

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3.3.8. [†]: [†]

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3.3.8.1 [†]: [†]

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Period of Work: **[†]**.

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3.3.8.2 [†]: [†]

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3.3.8.3 [†]: [†]

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3.3.8.4 [†]: [†]

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3.3.8.5 [†]: [†]

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Period of Work: **[†]**.

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3.3.9.1 [†]: [†]

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3.3.9.2 [†]: [†]

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3.3.9.4 [†]: [†]

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Period of Work: **[†]**.

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3.3.9.5 [†]: [†]

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3.3.10 [†]: [†]

Period of Work: **[†]**.

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3.3.10.1 [†]: [†]

Period of Work: **[†]**.

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3.3.10.2 [†]: [†]

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3.3.11 [†]: [†]

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3.3.11.1 [†]: [†]

Period of Work: **[†]**

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3.3.11.2 [†]: [†]

Period of Work: **[†]**

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3.3.11.3 [†]: [†]

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3.3.11.4: [†]. [†]

Period of Work: **[†]**

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3.3.11.5 [†]. [†]

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3.3.11.6 [†]: [†]

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Period of Work: **[†]**.

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3.3.11.7 [†]: [†]

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3.3.11.8 [†]: [†]

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3.3.11.9 [†]: [†]

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3.3.11.10 [†]: [†]

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3.3.12 [†]. [†]

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3.3.12.1 [†]: [†]

Period of Work: **[†]**.

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3.3.12.2 [†]: [†]

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3.3.12.3 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.12.4 [†]: [†]

Period of Work: **[†]**.

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3.3.13 [†]: [†]

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3.3.13.1 [†]: [†]

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3.3.13.2 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.3.13.3 [†]: [†]

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3.3.13.4 [†]: [†]

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3.3.13.5 [†]: [†]

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3.3.14. [†]: [†]

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3.3.14.1 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.3.14.2 [†]: [†]

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3.3.14.3 [†]: [†]

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3.3.15 [†]: [†]

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3.3.15.1 [†]: [†]

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3.3.15.2 [†]: [†]

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3.3.15.3 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

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3.3.16.1 [†]: [†]

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3.3.16.1.1 [†]: [†]

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3.3.16.1.2 [†]: [†]

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3.3.16.2 [†]: [†]

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3.3.16.2.1 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.16.2.2 [†]: [†]

Period of Work: **[†]**.

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3.3.16.3 [†]: [†]

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3.3.16.3.1 [†]: [†]

Period of Work: **[†]**.

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3.3.16.3.2 [†]: [†]

Period of Work: **[†]**.

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3.3.17.1 [†]: [†]

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3.3.17.1.1 [†]: [†]

Period of Work: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.3.17.1.2 [†]: [†]

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3.3.17.2.1 [†]: [†]

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3.3.17.2.2 [†]: [†]

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3.3.17.2.3 [†]: [†]

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3.3.17.2.4 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.3.17.2.5 [†]: [†]

Period of Work: **[†]**.

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3.3.17.3 [†]: [†]

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Period of Work: **[†]**.

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3.4.1: [†]. [†]

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3.4.1.1: [†]. [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.4.1.2 [†]: [†]

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3.4.2 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.4.2.2 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.4.3.1 [†]: [†]

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3.4.3.1.3 [†]: [†]

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3.4.3.1.4 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.4.3.1.5 [†]: [†]

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3.4.3.2.1 [†].[†]

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3.4.3.2.2 [†]: [†]

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3.4.3.2.3 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.3.3 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.4.3 [†]: [†].

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3.4.4.5 [†]: [†]

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3.4.4.6 [†]: [†]

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3.4.4.7 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.5.1 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.6 [†]: [†]

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3.4.6.1 [†]: [†]

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3.4.6.1.1 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.4.6.2.1 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

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3.4.7.4 [†]: [†]

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3.4.8 [†]: [†]

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3.4.8.2 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.8.3 [†]: [†]

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3.4.8.4 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.9 [†]: [†]

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3.4.9.1 [†]: [†]

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3.4.9.1.1 [†]: [†]

Period of Work: **[†]**.

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3.4.9.1.2 [†]: [†]

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3.4.9.1.3 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.4.9.2 [†]: [†]

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3.4.9.2.1 [†]: [†]

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3.4.9.4 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.9.5 [†]: [†]

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3.4.10.1 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.11.1 [†]: [†]

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3.4.11.2 [†]: [†]

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3.4.11.3 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.4.11.4 [†]: [†]

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3.4.12 [†]: [†]

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3.4.12.1 [†]: [†]

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3.4.12.2 [†]: [†]

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3.4.14.1 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.14.1.1 [†]: [†]

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3.4.14.1.4 [†]: [†]

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3.4.14.2 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.14.2.1 [†]: [†]

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3.4.14.2.2 [†]: [†]

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3.4.14.2.4 [†]: [†]

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3.4.14.2.5 [†]: [†]

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3.4.14.3 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†].**

Deliverable: **[†]**.

3.4.14.3.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.4.14.3.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.4.14.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.4.14.5 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.4.15 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†].**

Deliverable: **[†].**

3.4.15.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.4.15.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.4.15.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.4.15.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.5 CLIN0003: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.1 [†]: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.5.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.2.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.2.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.2.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.5.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.3.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.5.3.1.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.5.3.1.2 [†]: [†]

Period of Work: **[†]**

Deliverable: **[†]**.

3.5.3.1.3 [†]: [†]

Period of Work: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: [†].

3.5.3.1.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.5.3.2 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.3.2.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.3.2.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.3.2.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.3.2.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.3.2.5 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.5.3.3 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†]**.

3.5.3.3.1 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.5.3.3.2 [†]: [†].

Period of Work: **[†].**

Deliverable: **[†].**

3.5.3.4 [†]: [†].

Period of Work: **[†].**

Deliverable: **[†]**

3.5.3.5 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.5.4 [†]: [†]

Period of Work: **[†].**

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: **[†]**.

3.5.4.1 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**.

3.5.4.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.4.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: [†].

3.5.4.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: [†].

3.5.5 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**.

3.5.5.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.5.5.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.6 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**.

3.5.6.1 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**.

3. 5.6.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.6.3 [†]: [†].

Period of Work: **[†]**.

Deliverable: **[†]**.

3.5.6.4 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**

3.6 CLIN0004: [†]

Period of Work: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: **[†]**.

3.6.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.1.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.1.2 [†]: [†]

Period of Work: [†].

Deliverable: **[†]**.

3.6.1.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.2 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†].**

3.6.2.1 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†]**

3.6.2.2 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.6.3 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†]**

3.6.3.1 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.6.3.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.3.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.3.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.6.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.4.1 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†].**

Deliverable: **[†].**

3.6.4.2 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†]**

3.6.5 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.6.5.1 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.6.5.2 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.6.6 [†]: [†]

Period of Work: **[†].**

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: **[†].**

3.6.6.1 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.6.6.2 [†]: [†]

Period of Work: **[†]**

Deliverable: **[†]**.

3.6.6.3 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†]**.

3.6.7 [†]: [†]

Period of Work: **[†].**

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: **[†].**

3.6.7.1 Program Management: [†].

Period of Work: **[†].**

Deliverable: **[†].**

3.6.7.2 [†]: [†].

Period of Work: **[†].**

Deliverable: **[†]**.

3.6.7.3 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†]**.

3.6.7.4 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†]**

3.6.8 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.6.8.1 [†]: [†]

Period of Work: [†].

Deliverable: **[†].**

3.6.8.2 [†]: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†].**

Deliverable: **[†].**

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Appendix B: Revised Statement of Work

3.0 CONTRACT

AVI BioPharma (AVI) Statement of Work for AVI-6003 as an effective therapeutic for Marburgvirus:

3.2 CLIN0005 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.2.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.2.2.1.1 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.2.2.1.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.2.1.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.2.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.2.2.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.2.2.2 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†].

Deliverable: [†].

3.2.3 [†]: [†]

[†]

Period of Work: [†].

Deliverable: [†].

3.2.3.1 [†]: [†].

Period of Work: [†].

Deliverable: [†].

3.2.3.1.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.3.1.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.3.1.3 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

[†]

Period of Work: [†].

Deliverable: [†]

3.2.3.1.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.3.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.3.2.1 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†]

Deliverable: [†].

3.2.3.2.2 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.2.3.2.3 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.2.3.2.3.1 [†]: [†]

Period of Work: [†]

Deliverable: [†]

3.2.3.2.4 [†]: [†]

Period of Work: [†]

Deliverable: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.2.4 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.2.4.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.1.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.1.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.1.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.1.4 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†].

Deliverable: [†].

3.2.4.1.5 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.2.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.2.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.2.4.2.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.2.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.2.5 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.3.1 [†]: [†]

Period of Work: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: [†].

3.2.4.3.2 [†]: [†]

Period of Work: [†]

Deliverable: [†]

3.2.4.3.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.4.3.4 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.2.4.3.5 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.5 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†]

Deliverable: [†]

3.2.5.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.5.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.5.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.5.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.5.5 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†].

Deliverable: [†].

3.2.5.6 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.5.7 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.2.5.8 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.2.5.9 [†]: [†].

Period of Work: [†].

Deliverable: [†].

3.2.6 [†]: [†]

3.2.6.3 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†].

3.2.7 [†]: [†]

[†]

Period of Work: [†].

Deliverable: [†].

3.2.7.1 [†]: [†].

Period of Work: [†].

Deliverable: [†].

3.2.7.2 Finance and EVMS: [†].

Period of Work: [†].

Deliverable: [†].

3.2.7.3 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.2.7.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3 [†]: [†]

[†]

Period of Work: [†].

Deliverable: [†].

3.3.1 [†]: [†]

[†]

Period of Work: [†].

Deliverable: [†]

3.3.1.1 [†]: [†]

Period of Work: [†].

Deliverable: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.1.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.1 [†]: [†]

Period of Work: [†].

Deliverable: [†]

[†]

3.3.2.1.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.1.2 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†].

Deliverable: [†].

3.3.2.1.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.1.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.2.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.2.2 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†].

Deliverable: [†].

3.3.2.2.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.2.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.2.5 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.2.6 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.3 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†].

Deliverable: [†].

3.3.2.3.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.3.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.2.5 [†]: [†]

Period of Work: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: [†]

3.3.2.6 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.3.1 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.3.3.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.4. [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.4.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.4.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.4.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.4.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.4.5 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.4.6 [†]:

[†]

Period of Work: [†].

Deliverable: [†].

3.3.5 [†]: [†]

Period of Work: [†].

Deliverable: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.5.1 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.3.5.2 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.3.5.3 [†]: [†]

Period of Work: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: [†]

3.3.6 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.3.6.1 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.3.6.2 [†]: [†]

Period of Work: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: [†]

3.3.6.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.7 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.7.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.7.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

CLIN0005 [†]: [†]

Period of Work: [†].

Deliverable: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.3.8. [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.8.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.8.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.8.3 [†]: [†]

Period of Work: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: [†].

3.3.8.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.8.5 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.9 [†]: [†]

Period of Work: [†].

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3.3.9.1 [†]: [†]

Period of Work: [†].

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.3.9.3 [†]: [†]

Period of Work: [†].

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3.3.9.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.3.9.5 [†]: [†]

Period of Work: [†].

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3.3.10 [†]: [†]

Period of Work: [†].

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3.3.10.1 [†]: [†]

Period of Work: [†].

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3.3.10.2 [†]: [†]

Period of Work: [†].

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3.3.11 [†]: [†]

Period of Work: [†]

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3.3.11.1 [†]: [†]

Period of Work: [†]

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3.3.11.2 [†]: [†]

Period of Work: [†]

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3.3.11.3 [†]: [†]

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Period of Work: [†]

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3.3.11.5 [†]. [†]

Period of Work: [†]

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3.3.11.6 [†]: [†]

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3.3.11.7 [†]: [†]

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Period of Work: [†].

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3.3.11.10 [†]: [†]

Period of Work: [†]

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3.3.12 [†]. [†]

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Deliverable: [†].

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Period of Work: [†].

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3.3.13 [†]: [†]

Period of Work: [†].

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3.3.13.1 [†]: [†]

Period of Work: [†].

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3.3.13.3 [†]: [†]

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Period of Work: [†].

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3.3.14. [†]: [†]

Period of Work: [†].

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3.3.14.1 [†]: [†]

Period of Work: [†].

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3.3.14.2 [†]: [†]

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Period of Work: [†].

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3.3.15 [†]: [†]

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3.3.15.1 [†]: [†]

Period of Work: [†].

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3.3.15.2 [†]: [†]

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3.3.15.3 [†]: [†]

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3.3.16.1 [†]: [†]

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Period of Work: [†].

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Period of Work: **[†].**

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3.3.16.2 [†]: [†]

Period of Work: **[†].**

Deliverable: **[†].**

3.3.16.2.1 [†]: [†]

Period of Work: **[†].**

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Period of Work: [†].

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Period of Work: [†].

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3.3.17.1 [†]: [†]

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3.3.17.1.1 [†]: [†]

Period of Work: [†].

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3.3.17.2.3 [†]: [†]

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3.3.17.3 [†]: [†]

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3.4.3.1.4 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.4.3.2 [†]: [†]

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3.4.3.2.1 [†]. [†]

Period of Work: [†].

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3.4.3.2.2 [†]: [†]

Period of Work: [†].

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3.4.3.2.3 [†]: [†]

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3.4.3.3 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.4.4.3 [†]: [†].

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3.4.4.6 [†]: [†]

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3.4.4.7 [†]: [†]

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3.4.5 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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Period of Work: [†].

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3.4.5.2 [†]: [†]

Period of Work: [†].

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3.4.5.4 [†]: [†]

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Period of Work: [†].

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3.4.6 [†]: [†]

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3.4.6.1 [†]: [†]

Period of Work: [†].

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3.4.6.1.2 [†]: [†]

Period of Work: [†].

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3.4.6.1.3 [†]: [†]

Period of Work: [†].

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Period of Work: [†].

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3.4.6.2.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.4.6.3 [†]: [†]

Period of Work: [†].

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3.4.6.4 [†]: [†]

Period of Work: [†].

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.7.1 [†]: [†]

Period of Work: [†].

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Period of Work: [†].

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3.4.7.3 [†]: [†]

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3.4.7.4 [†]: [†]

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3.4.8.2 [†]: [†]

Period of Work: [†].

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3.4.8.4 [†]: [†]

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3.4.8.5 [†]: [†].

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3.4.9.1 [†]: [†]

Period of Work: [†].

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3.4.9.1.1 [†]: [†]

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3.4.9.2.1 [†]: [†]

Period of Work: **[†].**

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†].**

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3.4.9.4 [†]: [†]

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3.4.9.5 [†]: [†]

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3.4.10 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.4.10.3 [†]: [†]

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3.4.11 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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Period of Work: [†]

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Period of Work: [†].

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3.4.14.3.1 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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Period of Work: [†].

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3.4.15 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.5.2.2 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.5.3.1.2 [†]: [†]

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3.5.3.1.3 [†]: [†]

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Period of Work: **[†]**.

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3.5.3.2.4 [†]: [†]

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† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

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3.5.4.1 [†]: [†]

Period of Work: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: [†].

3.5.4.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.5.4.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.5.4.4 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.5.5 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.5.5.1 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.5.5.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.5.6 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: [†].

Deliverable: [†].

3.5.6.1 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3. 5.6.2 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.5.6.3 [†]: [†].

Period of Work: [†].

Deliverable: [†].

3.5.6.4 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.6 CLIN0008: [†]

Period of Work: [†].

Deliverable: [†].

3.6.1 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.1.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.1.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.1.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.2 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.2.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.6.2.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.6.3.1 [†]: [†]

Period of Work: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: **[†]**.

3.6.3.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.3.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.3.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.6.4 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.4.1 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.4.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**

3.6.5 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.5.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.5.2 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.6 [†]: [†]

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.6.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.6.2 [†]: [†]

Period of Work: **[†]**

Deliverable: **[†]**.

3.6.6.3 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

3.6.7 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.6.7.1 Program Management: [†].

Period of Work: [†].

Deliverable: [†].

3.6.7.2 [†]: [†].

Period of Work: [†].

Deliverable: [†].

3.6.7.3 [†]: [†]

Period of Work: [†].

Deliverable: [†].

3.6.7.4 [†]: [†]

Period of Work: [†].

Deliverable: [†]

3.6.8 [†]: [†]

Period of Work: [†].

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Deliverable: [†].

3.6.8.1 [†]: [†]

Period of Work: **[†]**.

Deliverable: **[†]**.

3.6.8.2 [†]: [†].

Period of Work: **[†]**.

Deliverable: **[†]**.

† DESIGNATES PORTIONS OF THIS DOCUMENT THAT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT FILED SEPARATELY WITH THE COMMISSION.

Exhibit 10.4

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this "Amendment") is entered into as of this 30th day of August, 2011, by and between BMR-3450 MONTE VILLA PARKWAY LLC, a Delaware limited liability company ("Landlord"), and AVI BIOPHARMA, INC., an Oregon corporation ("Tenant").

RECITALS

A. WHEREAS, Landlord and Tenant entered into that certain Lease dated as of July 27, 2009, as amended by that certain Acknowledgement of Term Commencement Date and Term Expiration Date dated as of October 7, 2009 (collectively, and as the same may have been further amended, supplemented or modified from time to time, the "Lease"), whereby Tenant leases certain premises (the "Premises") from Landlord at 3450 Monte Villa Parkway in Bothell, Washington (the "Building");

B. WHEREAS, Tenant wants to extend the dates for effectiveness of the Termination Option and the Termination Notice due date; and

C. WHEREAS, Landlord and Tenant desire to modify and amend the Lease only in the respects and on the conditions hereinafter stated.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Definitions. For purposes of this Amendment, capitalized terms shall have the meanings ascribed to them in the Lease unless otherwise defined herein.

2. Amendment to Section 3.2. The first sentence of Section 3.2 of the Lease shall be amended and restated in its entirety to read as follows:

"Tenant shall have the one-time option to terminate this Lease (the "Termination Option") effective on March 1, 2013 (the "Permitted Early Termination Date") (except for those provisions that expressly survive the expiration or earlier termination of this Lease) upon delivery of written notice to Landlord no later than March 1, 2012 (the "Termination Notice"); provided that Tenant pay to Landlord at the time Tenant delivers to Landlord the Termination Notice a termination fee equal to Two Hundred Ten Thousand Five Hundred Fifty and 12/100 Dollars ($210,550.12), which Landlord and Tenant agree equals the sum of (a) any unamortized TI Allowance, (b) any unamortized broker fees or commissions and (c) one month of Base Rent at the rate in effect at the time of Tenant's exercise of the Termination Option (collectively, the "Termination Fee")."

3. Broker. Tenant represents and warrants that it has not dealt with any broker or agent in the negotiation for or the obtaining of this Amendment other than EDG Commercial Real Estate and agrees to indemnify, defend and hold Landlord harmless from any and all cost or liability for compensation claimed by any other broker or agent employed or engaged by it.

4. No Default. Tenant represents, warrants and covenants that, to Tenant's actual knowledge, without inquiry, Landlord and Tenant are not in default of any of their respective obligations under the Lease and no event has occurred that, with the passage of time or the giving of notice (or both) would constitute a default by either Landlord or Tenant thereunder.

5. Effect of Amendment. Except as modified by this Amendment, the Lease and all the covenants, agreements, terms, provisions and conditions thereof shall remain in full force and effect and are hereby ratified and affirmed. The covenants, agreements, terms, provisions and conditions contained in this Amendment shall bind and inure to the benefit of the parties hereto and their respective successors and, except as otherwise provided in the Lease, their respective assigns. In the event of any conflict between the terms contained in this Amendment and the Lease, the terms herein contained shall supersede and control the obligations and liabilities of the parties. From and after the date hereof, the term "Lease" as used in the Lease shall mean the Lease, as modified by this Amendment.

6. Mortgagee Consent. Landlord represents that there is currently no mortgagee with respect to the Property.

7. Miscellaneous. This Amendment becomes effective only upon execution and delivery hereof by Landlord and Tenant. The captions of the paragraphs and subparagraphs in this Amendment are inserted and included solely for convenience and shall not be considered or given any effect in construing the provisions hereof. All exhibits hereto are incorporated herein by reference. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease, lease amendment or otherwise until execution by and delivery to both Landlord and Tenant.

8. Counterparts. This Amendment may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, Landlord and Tenant have hereunto set their hands as of the date and year first above written, and acknowledge that they possess the requisite authority to enter into this transaction and to execute this Amendment.

LANDLORD:

BMR-3450 MONTE VILLA PARKWAY LLC,
a Delaware limited liability company

By: /s/ John Bonanno
Name: John Bonanno
Title: Sr. Vice President, Leasing & Development

TENANT:

AVI BIOPHARMA, INC.,
an Oregon corporation

By: /s/ Christopher Garabedian
Name: Christopher Garabedian
Title: President and Chief Executive Officer

STATE OF WASHINGTON)
: ss.
COUNTY OF SNOHOMISH)

I certify that I know or have satisfactory evidence that Christopher Garabedian is the person who appeared before me, and he acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Chief Executive Officer of AVI BioPharma, Inc., a corporation, to be the free and voluntary act of such corporation for the uses and purposes mentioned in the instrument.

Dated this 31 day of August, 2011.

/s/ Wendy M. Cort
[Signature of Notary]

Wendy M. Cort
[Print Name of Notary]

Notary Public in and for the State of Washington, residing at
3450 Monte Villa Parkway, Bothell.
My commission expires: 10/16/13.

STATE OF CALIFORNIA }
COUNTY OF SAN DIEGO } ss.

On August 30, 2011, before me, Nicole L. Smith, a Notary Public in and for said County and State, personally appeared John Bonanno,

_____,

who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.
Signature /s/ Nicole L. Smith

FOR NOTARY SEAL OR STAMP

Exhibit 31.1

CERTIFICATION

I, Christopher Garabedian, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of AVI BioPharma, Inc., (the "Registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

November 8, 2011

/s/ Christopher Garabedian

Christopher Garabedian
President and Chief Executive Officer
(Principal Executive and Financial Officer)

Exhibit 31.2

CERTIFICATION

I, Michael Jacobsen, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of AVI BioPharma, Inc., (the "Registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

November 8, 2011

/s/ Michael Jacobsen

Michael Jacobsen,
Vice President, Finance
(Principal Accounting Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(18 U.S.C. SECTION 1350)

I, Christopher Garabedian, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that this Quarterly Report of AVI BioPharma, Inc. on Form 10-Q for the quarterly period ended September 30, 2011, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of AVI BioPharma, Inc.

November 8, 2011

/s/ Christopher Garabedian

Christopher Garabedian,
President and Chief Executive Officer
(Principal Executive and Financial Officer)

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to AVI BioPharma, Inc. and will be retained by AVI BioPharma, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies this Quarterly Report on Form 10-Q pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by such Act, be deemed filed by AVI BioPharma, Inc. for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that AVI BioPharma, Inc. specifically incorporates it by reference.

Exhibit 32.2

CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(18 U.S.C. SECTION 1350)

I, Michael Jacobsen, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that this Quarterly Report of AVI BioPharma, Inc. on Form 10-Q for the quarterly period ended September 30, 2011, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of AVI BioPharma, Inc.

November 8, 2011

/s/ Michael Jacobsen

Michael Jacobsen,
Vice President, Finance
(Principal Accounting Officer)

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to AVI BioPharma, Inc. and will be retained by AVI BioPharma, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies this Quarterly Report on Form 10-Q pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by such Act, be deemed filed by AVI BioPharma, Inc. for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that AVI BioPharma, Inc. specifically incorporates it by reference.