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

FORM 10-Q

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

For the quarterly period ended June 30, 2014

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: 001-35005

ASSEMBLY BIOSCIENCES, INC.
(Exact name of Registrant as specified in its charter)

Delaware	**20-8729264**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

99 Hudson Street, 5th Floor, New York, New York 10013
(Address of principal executive offices, including zip code)

(646) 706-5208
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ 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 definition of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	☐	Accelerated Filer ☐	
Non-accelerated Filer	☐	(Do not check if smaller reporting company)	Smaller Reporting Company x

Indicate by check mark whether registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ☐ NO ☒

As of August 11, 2014 there were 8,688,059 shares of registrant's common stock outstanding.

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

ASSEMBLY BIOSCIENCES, INC.
(formerly Ventrus Biosciences, Inc.)

CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2014 (Unaudited)	December 31, 2013
ASSETS		
Current assets:		
Cash and cash equivalents	$ 21,316,328	$ 27,061,268
Advances to Assembly Pharmaceuticals, Inc	259,921	-
Other current assets	171,554	63,672
Total current assets	21,747,803	27,124,940
Computer equipment, net	7,399	7,102
Total assets	$ 21,755,202	$ 27,132,042
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,421,353	$ 2,614,619
Accrued expenses	48,435	23,435
Total current liabilities	1,469,788	2,638,054
Commitments		
Stockholders' equity:		
Preferred stock, $.001 par value; 5,000,000 shares authorized; 0 and 44,000 issued and outstanding at June 30, 2014 and December 31, 2013, respectively	-	44
Common stock, $.001 par value; 50,000,000 shares authorized; 4,679,251 and 4,146,779 issued and outstanding at June 30, 2014 and December 31, 2013, respectively	4,679	4,147
Additional paid-in capital	138,174,448	135,844,320
Common stock issuable, 25,000 shares at June 30, 2014 and December 31, 2013	368,750	368,750
Accumulated deficit	(118,262,463)	(111,723,273)
Total stockholders' equity	20,285,414	24,493,988
Total liabilities and stockholders' equity	$ 21,755,202	$ 27,132,042

See Notes to Condensed Consolidated Financial Statements

ASSEMBLY BIOSCIENCES, INC.
(formerly Ventrus Biosciences, Inc.)

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

	Three Months Ended June 30, 2014	Three Months Ended June 30, 2013	Six Months Ended June 30, 2014	Six Months Ended June 30, 2013
Operating expenses:				
Research and development	$ 1,095,644	$ 3,508,450	$ 4,069,334	$ 6,117,553
General and administrative	1,410,500	1,300,309	2,546,961	2,460,174
Loss from operations	(2,506,144)	(4,808,759)	(6,616,295)	(8,577,727)
Other income (expense)				
Interest income	36,871	56,871	77,105	102,744
Net loss	$ (2,469,273)	$ (4,751,888)	$ (6,539,190)	$ (8,474,983)
Basic and diluted net loss per common share	$ (.52)	$ (1.20)	$ (1.43)	$ (2.30)
Weighted average common shares outstanding - basic and diluted	4,704,251	3,944,496	4,562,384	3,679,276

See Notes to Condensed Consolidated Financial Statements

ASSEMBLY BIOSCIENCES, INC.
(formerly Ventrus Biosciences, Inc.)

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Six Months Ended June 30, 2014	Six Months Ended June 30, 2013
Cash flows from operating activities:		
Net loss	$ (6,539,190)	$ (8,474,983)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	566,335	979,575
Stock-based payments to consultants	1,177	22,190
Depreciation	2,292	2,678
Changes in operating assets and liabilities:		
Other current assets	(367,803)	(117,939)
Accounts payable and accrued expenses	(1,168,266)	(160,075)
Net cash used in operating activities	(7,505,455)	(7,748,554)
Cash flows from investing activities:		
Purchase of office and computer equipment	(2,589)	(5,166)
Net cash used in investing activities	(2,589)	(5,166)
Cash flows from financing activities:		
Net proceeds from sale of common and preferred stock	1,763,104	20,754,418
Net cash provided by financing activities	$ 1,763,104	$ 20,754,418
Net (decrease) increase in cash and cash equivalents	(5,744,940)	13,000,698
Beginning of period	27,061,268	20,489,219
End of period	$ 21,316,328	$ 33,489,917

See Notes to Condensed Consolidated Financial Statements

ASSEMBLY BIOSCIENCES, INC.
(formerly Ventrus Biosciences, Inc.)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (June 30, 2014)

Note 1 - Organization, Business and Basis of Presentation:

Organization and business:

Assembly Biosciences, Inc. ("Assembly" or the "Company") (formerly known as Ventrus Biosciences, Inc.) is a biopharmaceutical company developing novel therapies for infectious diseases and other disorders of the gastrointestinal system. To date, the Company has not generated any revenue nor had income producing activities. Assembly was incorporated in the State of Delaware on October 7, 2005 and commenced operations in April 2007. On July 11, 2014, the Company's wholly owned subsidiary merged with and into Assembly Pharmaceuticals, Inc. (the "Assembly Merger"), with Assembly Pharmaceuticals, Inc. as the surviving entity. In connection with the Assembly Merger, on July 11, 2014, the Company changed its name from Ventrus Biosciences, Inc. to Assembly Biosciences, Inc.

Assembly is focused on treating certain infectious diseases that are particularly difficult to treat and control, determined to forge a new and different path and overcome the limitations of conventional approaches to treating these conditions. Assembly's initial target is the hepatitis B virus, or HBV, with a specific goal of helping patients find a clinical cure. Assembly Pharmaceuticals, Inc. (with which we merged on July 11, 2014) has discovered a series of new compounds, known as core protein allosteric modulators, or CpAMs, that are capable of targeting and altering certain key proteins of HBV. These core proteins are involved in several steps of the HBV lifecycle and are essential for HBV's continued regeneration and survival. Modulation of these core proteins with Assembly's CpAMs has demonstrated preclinical proof of principle: multiple cell models have shown that CpAMs can selectively reduce the production of viral antigens—viral proteins responsible for common symptoms related to HBV—as well as reduce viral load—infectious viral particles circulating in the bloodstream.

Assembly's second lead program is based on a new platform for targeted oral delivery of microbiome therapy agents to combat a type of infectious diarrhea called clostridium difficile-associated diarrhea, or CDAD. This delivery platform aims to deliver several types of beneficial bacteria, viruses, proteins and other small molecules to the gastrointestinal, or GI, tract—specifically the colon and/or the terminal ileum. The technology exploits recent data on nuanced differences in pH throughout the GI tract from the stomach to the distal colon, as well as recent advances in encapsulation technologies.

Reverse Stock Split

The Company effected a 1-for-5 reverse stock split of the Company's common stock on July 11, 2014. All references to common stock, shares outstanding, average number of shares outstanding and per share amounts in these condensed consolidated financial statements and notes to condensed consolidated financial statements have been restated to reflect the 1-for-5 reverse stock split on a retroactive basis.

Basis of presentation:

The accompanying consolidated financial statements include the accounts and results of operations of Assembly Biosciences, Inc. and its wholly owned subsidiary, Assembly Acquisition, Inc., which was incorporated on May 5, 2014 in anticipation of the planned Assembly Merger. The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). All intercompany balances and transactions have been eliminated in consolidation.

The accompanying condensed balance sheet as of December 31, 2013, which has been derived from the Company's audited financial statements, and the unaudited interim condensed consolidated financial statements, have been prepared in accordance with U.S. generally accepted accounting principles and the rules and regulations of the Securities and Exchange Commission ("SEC") related to a quarterly report on Form 10-Q. Certain information and note disclosures normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States have been condensed or omitted pursuant to those rules and regulations, although the Company believes that the disclosures made are adequate to make the information presented not misleading. The unaudited interim consolidated financial statements reflect all adjustments which, in the opinion of management, are necessary for a fair presentation of the results for the periods presented. All such adjustments are of a normal and recurring nature. These 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, 2013 filed on March 31, 2014. The operating results presented in these unaudited condensed consolidated financial statements are not necessarily indicative of the results that may be expected for any future periods.

Capital Resources:

The Company has not derived any revenue from product sales to date as our products have not been approved for sale by the FDA or any foreign regulatory agency. Since inception, the Company's operations have been financed primarily through the sale of equity securities, the proceeds from the exercise of warrants and stock options and issuance of debt. The Company has incurred losses from operations and negative cash flows since inception and expects to continue to incur substantial losses for the next several years as it continues its product development efforts. Management believes the Company currently has sufficient funds to meet its operating requirements for the next twelve months. If the Company cannot generate significant cash from its operations, it intends to obtain any additional funding it requires through strategic relationships, public or private equity or debt financings, or other arrangements and it cannot assure such funding will be available on reasonable terms, or at all.

Note 2 - Summary of Significant Accounting Policies:

Cash and Cash Equivalents:

All highly liquid investments with maturities of three months or less at the time of purchase are considered to be cash equivalents. All of the Company's cash equivalents have liquid markets and high credit ratings. The Company maintains its cash in bank deposit and other accounts, the balances of which, at times and at June 30, 2014, exceed federally insured limits.

Use of estimates:

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

Significant estimates inherent in the preparation of the accompanying financial statements include the fair value of stock options and warrants granted to employees, consultants, directors, investors, licensors, placement agents and underwriters.

Additionally, the Company provides a valuation allowance for deferred income tax assets when it is considered more likely than not that all or a portion of such deferred income tax assets will not be realized.

Stock-based compensation:

The Company's share-based compensation cost is measured at grant date, using the Black-Scholes option pricing model to estimate the fair values of the stock option awards, and the Monte Carlo valuation model to estimate the fair value of the restricted stock grant. Stock based compensation is recognized as expense over the employee's or director's requisite service period on a straight-line basis. The Company accounts for stock options and warrants granted to non-employees on a fair value basis which is estimated using the Black-Scholes option pricing model. The initial non-cash charge to operations for non-employee options and warrants with vesting are revalued at the end of each reporting period until vested and recognized as consulting expense over the related vesting period.

Research and development:

Research and development expenses include personnel and facility-related expenses, third party contracted services including clinical trial costs, manufacturing and process development costs, research costs and other consulting services. Research and development costs are expensed as incurred. In instances where the Company enters into agreements with third parties for clinical trials, manufacturing and process development, research and other consulting activities, costs are expensed as services are performed. Amounts due under such arrangements may be either fixed fee or fee for service, and may include upfront payments, monthly payments, and payments upon the completion of milestones or receipt of deliverables.

The Company's accruals for clinical trials are based on estimates of the services received and pursuant to contracts with the respective clinical trial centers and clinical research organizations. In the normal course of business, the Company contracts with third parties to perform various clinical trial activities in the ongoing development of potential products. The financial terms of these agreements are subject to negotiation and variation from contract to contract and may result in uneven payment flows. Payments under the contracts depend on factors such as the achievement of certain events, the successful enrollment of patients, and the completion of portions of the clinical trial or similar conditions. The objective of the Company's accrual policy is to match the recording of expenses in its financial statements to the actual services received. As such, expense accruals related to clinical trials are recognized based on an estimate of the degree of completion of the event or events specified in the specific clinical study or trial contract.

Income taxes:

The Company's income tax expense consists of current and deferred income tax expense or benefit. Current income tax expense or benefit is the amount of income taxes expected to be payable or refundable for the current year. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are established when it is more likely than not that some or all of the deferred tax assets will not be realized.

Loss per common share:

Basic net loss per common share excludes dilution and is computed by dividing net loss by the weighted average number of common shares outstanding during the period. Diluted net loss per common share reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that then shared in the earnings of the entity unless inclusion of such shares would be anti-dilutive. Since the Company has only incurred losses, basic and diluted net loss per share is the same. The number of potentially dilutive securities (options, warrants, restricted stock units and preferred stock) excluded from the diluted loss per share calculation for the three month periods ended June 30, 2014 and 2013 was 3,814,170 and 4,983,126 and six-month periods ended June 30, 2014 and 2013 was 3,814,170 and 5,518,126, respectively.

Recently Adopted Accounting standards:

In June 2014, the FASB issued Accounting Standard Update No. 2012-10, Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation. The amendments in this update remove the definition of a development stage entity from the Master Glossary of the Accounting Standards Codification, thereby removing the financial reporting distinction between development stage entities and other reporting entities from GAAP. In addition, the amendments eliminate the requirements for development stage entities to (1) present inception-to-date information in the statements of income, cash flows and shareholder equity, (2) label the financial statements as those of a development stage entity, (3) disclose a description of the development state activities in which the entity is engaged, and (4) disclose in the first year in which the entity is no longer a development stage entity that in prior years it had been in the development stage. A public entity is required to apply the amendments for annual reporting periods beginning after December 15, 2014, and interim periods therein. An entity should apply the amendments retrospectively for all comparative periods presented. Early adoption is permitted. The guidance became effective for the Company in the second quarter of 2014. Adoption of this standard did not have a material impact on the Company's financial position, statement of operations, or statement of cash flows.

Note 3 - Commitments:

Employment agreements:

On January 15, 2014, the Company entered into an employment agreement with its Chief Executive Officer and its Chief Financial Officer, with an effective date of December 22, 2013. Each agreement has a term of two years and will be automatically extended for additional one-year periods unless the Company notifies the officer at least 180 days prior to the then current expiration date that it intends to not extend the employment agreement. The employment agreements provide for a base salary of $475,000 per year for the Chief Executive Officer and $300,000 for the Chief Financial Officer, and an annual
discretionary bonus of up to 50% of the officer's base salary based on financial, clinical development and business milestones established by the Board of Directors.

See Note 7 for a discussion of employment agreements entered into by the Company in connection with the Assembly Merger.

Note 4 - Stockholders' Equity:

Common Stock Transactions:

The Company filed a shelf registration statement with the Securities and Exchange Commission, which became effective on February 10, 2012, under which it may offer shares of its common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, in one or more offerings, up to a total dollar amount of $100,000,000. As part of the shelf registration statement, the Company included a prospectus for an at-the-market common equity sales program for the sale of up to $20,000,000 of common stock. From May 2012 through December 2013, the Company sold an aggregate of 1,630,849 shares of common stock and 44,000 shares of Series A Non-Voting Preferred Stock, convertible into 440,000 shares of common stock, under the shelf, resulting in net proceeds of approximately $28,566,000. In January 2014, the Company sold an aggregate of 92,473 shares of common stock under the amended at-the-market common equity sales program, resulting in net proceeds of approximately $1,763,000. As of June 30, 2014, an aggregate of approximately $70,000,000 worth of securities was available under the shelf registration statement out of which approximately $15,000,000 of common stock was available for the at-the-market common equity sales program. However, pursuant to SEC rules, because the Company's publicly held shares had a market value of less than $75,000,000 as of June 30, 2014, the Company is limited to selling under the shelf in any 12-month period an amount of securities equal to one-third of the market value of its publicly held shares, which, as of June 30, 2014, was approximately $10,100,000.

Preferred Stock Transactions:

The Series A non-voting convertible preferred shares had a liquidation preference of $0.001 per share and each share of Series A preferred stock was convertible into 10 common shares of the Company's common stock at any time at the holder's option. During February 2014, all 44,000 outstanding shares of Series A preferred stock converted into an aggregate of 440,000 shares of the Company's common stock.

Common Stock Options and Warrants:

Warrants

In connection with the Company's financings from 2007 to 2010, the Company issued warrants to investors and/or placement agents to purchase shares of common stock as well as certain consultants.

A summary of the Company's warrant activity and related information is as follows:

	Six Months Ended June 30, 2014	
	Shares	Weighted Average Exercise Price
Outstanding at beginning of period	172,209	$ 38.85
Expired	(20,973)	$ 33.00
Outstanding at end of period	151,236	$ 39.65
Warrants exercisable at end of period	151,236	$ 39.65

Common Stock

On April 5, 2013, the Company granted restricted stock units to four employees under the 2010 Plan for an aggregate of 100,000 shares of common stock. Of these units, 25% vested immediately at the grant date. The remaining 75% of the units will vest in equal 25% tranches if the 20 trading day volume-weighted average price of our common stock as reported on the NASDAQ Capital Market is at least $20.75, $25.75 and $30.75, respectively. The performance period for the unvested restricted stock units ends on June 30, 2016; if one or more of the stock price thresholds are not met by that date the unvested units will expire. Each employee elected to defer receipt of all shares issuable under the units, including the immediately vested shares, (these shares are shown as issuable at June 30, 2014) until the earliest of termination of employment, a change in control of Assembly, or April 1, 2015. The restricted stock units were issued to employees and officers at a price equal to the market price of the Company's stock at the date of grant. The Company estimated the fair value of the restricted stock units using the Monte Carlo valuation model with the following assumptions; volatility of 56.10% , risk free interest rate of 1.934%, and dividend rate of 0%. The total estimated fair value of the restricted stock units was approximately $1,135,000. Compensation costs for restricted stock award are being recognized on a straight-line basis over the performance period. The first 25% of restricted stock grant was immediately expensed.

A summary of the status of our restricted stock units as of June 30, 2014 is as follows:

	Six Months Ended June 30, 2014	
	Shares	Weighted Average Grant Date Fair Value Per Share
Restricted stock units as of January 1, 2014	75,000	$ 10.20
Restricted stock units as of June 30, 2014	75,000	$ 10.20

Stock Options

In January 2014, the Company granted options to purchase an aggregate of 121,700 shares under the 2010 Plan to the Chief Executive Officer and the Chief Financial Officer at an exercise price of $19.05 per share. The Company also granted options to purchase 1,000 shares to a consultant at a price of $18.80.

A summary of the Company's option activity and related information is as follows:

	Six Months Ended June 30, 2014		
	Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value
Outstanding at beginning of period	467,698	$ 29.35	$ -
Granted	122,700	$ 19.05	$ -
Exercised	-	$ -	$ -
Forfeited	(53,800)	36.10	-
Outstanding at end of period	536,598	$ 26.30	$ -
Options exercisable at end of period			

The fair value of the options granted for the six-month period ended June 30, 2014, was based on the following assumptions:

	2014
Risk-free interest rate	2.30%
Expected volatility	51.29%
Expected life of options	5 years
Expected dividend yield	0%

Estimated future stock-based compensation expense relating to unvested stock options is as follows:

Calendar Years Ending December 31,	Future Stock Option Compensation Expense
2014 (July through December)	$ 467,914
2015	613,353
2016	542,500
2017	63,500
Total estimated future stock-based compensation expense – stock options	$ 1,687,267

The weighted average remaining contractual life of options outstanding at June 30, 2014 is approximately 7 years. Stock- based compensation expensed to research and development expense for the three and six months ended June 30, 2014 and 2013 was $(4,335) and $73,976 (including reversal of charges related to unvested options which were forfeited) and $143,919 and $348,104, respectively. Stock-based compensation expensed to general and administrative expense for the three and six months ended June 30, 2014 and 2013 was $259,052 and $493,536 and $140,671 and $653,661, respectively.

Note 5 - License Agreements:

Targeted Colonic Delivery Platform

On November 8, 2013, Assembly entered into a License and Collaboration Agreement with Therabiome, LLC, for all intellectual property and know-how owned or controlled by Therabiome relating to the oral delivery of pharmaceutical drugs to specific sites in the intestine, using a pH sensitive controlled release platform technology. Under the agreement, Therabiome granted to Assembly the exclusive worldwide license, with rights to sublicense, to develop the intellectual property for commercialization (a) in the use of bacteria, viruses, proteins and small molecules by oral delivery in (i) gastro-intestinal dysbiosis, including but not limited to C. difficile, irritable bowel syndrome-constipation and inflammatory bowel disease, (ii) auto-immune disorders and autism, including but not limited to as controlled by bacteria or virus, and (iii) orally delivered vaccines, including viral and bacterial, and (b) any oral delivery of small molecules using the licensed intellectual property. Assembly will be solely responsible for all research and development activities with respect to any product it develops under the license.

For the license, Assembly paid Therabiome an upfront non-refundable license fee of $300,000. Assembly must pay Therabiome clinical and regulatory milestones for each product or therapy advanced from the platform for U.S. regulatory milestones. Assembly also must pay Therabiome lesser amounts for foreign regulatory milestones, which vary by country and region. Assembly also must pay Therabiome royalties on annual net sales of a product in the low to mid-single digit percentages plus, once annual net sales exceed two certain thresholds, a one-time cash payment upon reaching each threshold.

Therabiome must pay Assembly royalties on annual net sales of any product it develops, using the intellectual property, in the low double to mid-double percentages, depending on the level of development or involvement Assembly had in the product.

Diltiazem (VEN 307) and Phenylepherine (VEN 308)

At June 30, 2014, the Company had an exclusive royalty-bearing license agreement with S.L.A. Pharma, AG (“S.L.A. Pharma”) to sell, make and use diltiazem (VEN 307) for treatment, through topical administration, of anal fissures and phenylepherine (VEN 308) for treatment, through topical administration, of fecal incontinence (referred to collectively as the “Compound Technologies”) in the United States, Canada and Mexico. In the event that the Compound Technologies were commercialized, Assembly was obligated to pay to S.L.A. Pharma annual royalties, based upon net sales of the products. In addition, Assembly was required to make payments to S.L.A. Pharma up to an aggregate amount of $20 million upon the achievement of various milestones related to regulatory events.

On July 24, 2014, the Company notified S.L.A. Pharma that it was terminating the license agreement. Pursuant to the terms of the agreement, the termination will be effective on October 22, 2014. There were no early termination penalties as a result of the termination and the Company has no continuing obligation to make payment to S.L.A. Pharma under the agreement. The Company terminated the agreement to focus on the development of its potentially curative programs for HBV, which program was acquired on July 11, 2014 in the merger with Assembly Pharmaceuticals, Inc., and CDAD, which was licensed in November 2013 from Therabiome, LLC.

Note 6 - Legal Proceedings:

In June 2012, the Company announced that its product iferanserin (VEN 309), failed to meet its end point at the completion of its Phase III clinical trial. In May 2013 two purported class action lawsuits alleging violations of the federal securities laws were filed in New York against the Company, two of its executive officers and the lead underwriter of its initial public offering. The lawsuits include allegations that, during the class period between December 17, 2010 and June 25, 2012, the Company and its executive officers and underwriter made various statements related to the Company's product, iferanserin (VEN 309), including but not limited to, the market for the product, the potential competitors, and the results of clinical trials, thereby inflating the price of our common stock. The complaints seek unspecified damages, interest, attorneys' fees, and other costs. On July 23, 2013, the Court consolidated the actions and appointed lead plaintiffs and lead counsel. On September 16, 2013, lead plaintiffs filed a consolidated amended complaint. On November 22, 2013, the Company filed a motion to dismiss the consolidated amended complaint (the "Motion to Dismiss").

On May 5, 2014, the Court entered an order granting the Motion to Dismiss and dismissed the class action with prejudice. On May 19, 2014, lead plaintiffs filed a Motion for Reconsideration of the Court's order dismissing the class action with prejudice (the "Motion for Reconsideration"). On July 2, 2014, the Court entered an order denying the Motion for Reconsideration. Lead plaintiffs had until August 2, 2014 to file notice of an appeal, but no appeal was filed.

Note 7 – Subsequent Events:

On July 11, 2014, the Company completed the Assembly Merger, whereby Assembly Pharmaceuticals, Inc. became the Company's wholly owned subsidiary. Pursuant to the terms of the Assembly Merger, the shares of Assembly Pharmaceuticals, Inc. common stock issued and outstanding were converted into an aggregate of 4,008,848 shares of the Company's common stock. Also pursuant to the terms of the Assembly Merger, the options to purchase shares of Assembly Pharmaceuticals, Inc. common stock issued and outstanding immediately prior to the Effective Time were assumed by the Company and became exercisable for an aggregate of 621,651 shares of the Company's common stock.

On July 10, 2014, the Company's stockholders approved the 2014 Stock Incentive Plan, under which an aggregate of 2,560,000 shares of the Company's common stock is reserved for the issuance of equity awards to employees, directors and consultants of the Company and its subsidiaries.

Effective July 10, 2014, all of the Company's directors serving prior to the 2014 Annual Meeting of Stockholders and all of its employees forfeited an aggregate of 514,445 options, with exercise prices ranging between $12.35 and $78.85, and an aggregate of 75,000 restricted stock units, which were to vest when the 20 trading day volume weighted average price of the Company's common stock was $20.75, $25.75 and $30.75. Also on July 10, 2014, the Company granted options to purchase an aggregate of 2,560,000 shares of its common stock to its directors and employees with an exercise price of $7.20 and which vest one third on the date of grant, one third on the first anniversary of the option grant date and one third on the second anniversary of the option grant date. The Company expects to record a material charge related to the modification of the existing options.

In connection with the Assembly Merger, effective July 11, 2014, the Company entered into employment agreements with its President and Chief Operating Officer, its Chief Medical Officer, and its Chief Scientific Officer. The President's employment agreement has a term of two years and will be automatically extended for additional one-year periods unless the Company notifies the President at least 180 days prior to the then current expiration date that it intends to not extend the employment agreement. The other two employment agreements provide for at-will employment, subject to payment of severance benefits depending on the circumstances of termination. The employment agreements provide for a base salary of $350,000 per year for the President, $290,000 per year for the Chief Medical Officer and $315,000 per year for the Chief Scientific Officer. Each employee is also eligible for an annual discretionary bonus based on achievement of financial, clinical development and business milestones established by the Board of Directors, with the President eligible for a bonus of up to 50% of his base salary, and the Chief Medical Officer and the Chief Scientific Officer eligible for a bonus of up to 30% of their respective base salaries. The President and the Chief Medical Officer will also be eligible for a retention bonus payable after three months of employment in the amount of $150,000 and $100,000, respectively.

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

The interim financial statements and this Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the financial statements and notes thereto for the year ended December 31, 2013, and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K for the year ended December 31, 2013 filed on March 31, 2014. In addition to historical information, this discussion and analysis contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements are subject to risks and uncertainties, including those set forth under "Part I. Item 1. Business - Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2013, and elsewhere in this report, that could cause actual results to differ materially from historical results or anticipated results.

Overview

We are a biopharmaceutical company developing novel therapies for infectious diseases and other disorders of the gastrointestinal system. On July 11, 2014, we merged with Assembly Pharmaceuticals Inc. (the "Assembly Merger"). In connection with the Assembly Merger, on July 11, 2014, we changed our name from Ventrus Biosciences, Inc. to Assembly Biosciences, Inc.

We are focused on treating certain infectious diseases that are particularly difficult to treat and control, determined to forge a new and different path and overcome the limitations of conventional approaches to treating these conditions. Our target is the hepatitis B virus, or HBV, with a specific goal of helping patients find a clinical cure. Assembly Pharmaceuticals, Inc. (with which we merged on July 11, 2014) has discovered a series of new compounds, known as core protein allosteric modulators, or CpAMs, that are capable of targeting and altering certain key proteins of HBV. These core proteins are involved in several steps of the HBV lifecycle and are essential for HBV's continued regeneration and survival. Modulation of these core proteins with Assembly's CpAMs has demonstrated preclinical proof of principle: multiple cell models have shown that CpAMs can selectively reduce the production of viral antigens—viral proteins responsible for common symptoms related to HBV—as well as reduce viral load—infectious viral particles circulating in the bloodstream.

Our second lead program is based on a new platform for targeted oral delivery of microbiome therapy agents to combat a type of infectious diarrhea called clostridium difficile-associated diarrhea, or CDAD. This delivery platform aims to deliver several types of beneficial bacteria, viruses, proteins and other small molecules to the gastrointestinal, or GI, tract—specifically the colon and/or the terminal ileum. The technology exploits recent data on nuanced differences in pH throughout the GI tract from the stomach to the distal colon, as well as recent advances in encapsulation technologies.

In February 2014, we announced that the results of the clinical trial for VEN 307 (diltiazem 2% cream) demonstrated no significant improvement compared to placebo. As a result, and to focus on the development of our HBV program that we acquired on July 11, 2014 in the merger with Assembly Pharmaceuticals, Inc., and the CDAD technology we licensed in November 2013, we terminated the VEN 307 program, as well as our VEN 308 program, in July 2014, and gave notice to the licensor, S.L.A. Pharma, AG, that we were terminating the license agreement for VEN 307 and VEN 308, which termination will be effective on October 22, 2014.

Since our inception, we have had no revenue from product sales, and have funded our operations principally through debt financings prior to our initial public offering in 2010 and through equity financings since then. Our operations to date have been primarily limited to organizing and staffing our company, licensing our product candidates, developing clinical trials for our product candidates, establishing manufacturing for our product candidates, maintaining and improving our patent portfolio and raising capital. We have generated significant losses to date, and we expect to continue to generate losses as we continue to develop our product candidates. As of June 30, 2014, we had an accumulated deficit of $118,262,463. Because we do not generate revenue from any of our product candidates, our losses will continue as we seek regulatory approval and commercialization of our product candidates. As a result, our operating losses are likely to be substantial over the next several years as we continue the development of our product candidates and thereafter if none is approved or successfully launched. We are unable to predict the extent of any future losses or when we will become profitable, if at all.

We believe that our existing cash will be sufficient to fund our projected operating requirements for at least the next twelve months.

Our operations are subject to other certain risks and uncertainties, including but not limited to: uncertainty of product candidate development; uncertainty of regulatory approval; unpredictability of the size of the markets for, and market acceptance of, any of our products; our anticipated capital expenditures, our estimates regarding our capital requirements; our ability to retain and hire necessary employees and to staff our operations appropriately; and the possible impairment of, or inability to obtain, intellectual property rights and the costs of obtaining such rights from third parties. Any significant delays in the development or marketing of products could have material adverse effect on our business and financial results.

Results of Operations

Comparison of the Three Months Ended June 30, 2014 and June 30, 2013

Research and Development Expense

Research and development expense was $1,095,644 for the three months ended June 30, 2014, a decrease of $2,412,806 or 68.8%, from $3,508,450 for the same period in 2013. The reason for the decrease was due to the clinical trial for VEN 307 ending as well as reduced stock based compensation.

General and Administrative Expense

General and administrative, or G&A, expense consists primarily of salaries, consulting fees and other related costs, professional fees for legal services and accounting services, insurance and travel expenses, as well as the stock based compensation expense associated with the grants of options to our employees, consultants and directors.

G&A expense was $1,410,500 for the three months ended June 30, 2014, an increase of $110,191 or 8.5.% from $1,300,309 for the three months ended June 30, 2013. The reason for the increase was mostly due to legal, accounting and other expenses for the merger with Assembly Pharmaceuticals, which was announced on May 19, 2014, and closed on July 11, 2014.

Interest Income and Expense

Interest income was $36,871 for the three months ended June 30, 2014 compared to $56,871 for the same period in 2013 due to lower cash balances.

Comparison of the Six Months Ended June 30, 2014 and June 30, 2013

Research and Development Expense

Research and development expense was $4,069,334 for the six months ended June 30, 2014, a decrease of $2,048,219 or 33.5%, from $6,117, 553 the same period in 2013. The reason for the decrease was a combination of the VEN 307 trial ending and lower stock based compensation expense.

General and Administrative Expense

G&A expense was $2,546,961 for the six months ended June 30, 2014, an increase of $86,787 or 3.5% from $2,460,174 for the six months ended June 30, 2013 due to legal, accounting and other expenses for the Assembly Pharmaceuticals merger.

Interest Income and Expense

Interest income was $77,105 for the six months ended June 30, 2014 compared to $102,744 for the same period in 2013 due to lower cash balances.

Liquidity and Capital Resources

Sources of Liquidity

As a result of our significant research and development expenditures and the lack of any FDA-approved products to generate product sales revenue, we have not been profitable and have generated operating losses since we were incorporated in October 2005. We have funded our operations through June 30, 2014 principally with convertible debt and equity financing, raising an aggregate of approximately $ 108.5 million in net proceeds from public offerings and private placements from inception to June 30, 2014.

Further, under a shelf registration statement filed with the Securities and Exchange Commission, or SEC, we raised approximately $1.8 million in net proceeds under our at-the-market equity sales program in January 2014. As of June 30, 2014, an aggregate of approximately $70,000,000 worth of securities was available under the shelf registration statement out of which approximately $15,000,000 of common stock was available for the at-the-market common equity sales program. However, pursuant to SEC rules, because our publicly held shares had a market value of less than $75,000,000 as of June 30, 2014, we are limited to selling under the shelf in any 12-month period an amount of securities equal to one-third of the market value of our publicly held shares, which, as of June 30, 2014, was approximately $10,100,000.

Net Cash Used in Operating Activities

Net cash used in operating activities was $7,505,455 for the six months ended June 30, 2014 and funded our research and development program and our general and administrative expenses.

Net Cash Used in Investing Activities

Net cash used in investing activities was $2,589 for the six months ended June 30, 2014.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was $1,763,104 for the six months ended June 30, 2014, and was from the sale of shares of our common stock pursuant to the at-the-market common equity sales program.

Funding Requirements

We expect to incur losses for at least the next several years as we develop our product pipeline. We expect to incur increasing research and development expenses as we begin preclinical and clinical activities on both platform technologies. We expect that our general and administrative expenses will also increase as we add infrastructure related to the merger with Assembly Pharmaceuticals. Our future capital requirements will depend on a number of factors, including the timing and outcome of preclinical activities, clinical trials and regulatory approvals, the costs involved in preparing, filing, prosecuting, maintaining, defending, and enforcing patent claims and other intellectual property rights, the acquisition of licenses to new products or compounds, the status of competitive products and the availability of financing.

Based on our cash position at June 30, 2014, and our analysis of our future development costs, we believe that our existing cash and cash equivalents will be sufficient to enable us to fund our operating expenses and capital expenditure requirements into the fourth quarter of 2015. We have based these estimates on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect, which would cause us to require additional capital earlier. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated preclinical and clinical activities. We will need to raise additional funds to continue and finalize the development of our product candidates.

We may need to finance our future cash needs through public or private equity offerings, debt financings, corporate collaboration and licensing arrangements, or a bank credit facility or other financing vehicle if one or more of our assumptions prove to be incorrect or if we choose to expand our product development efforts more rapidly than we presently anticipate, and we may decide to raise additional funds even before we need them if the conditions for raising capital are favorable. We do not currently have any commitments for future external funding. The sale of additional equity or debt securities, if convertible, could result in dilution to our stockholders. The incurrence of indebtedness would result in increased fixed obligations and could also result in covenants that would restrict our operations.

Additional equity or debt financing or corporate collaboration and licensing arrangements may not be available on acceptable terms, if at all. If we need additional capital and adequate funds are not available, we may be required to delay, reduce the scope of or eliminate our research and development programs, reduce our planned commercialization efforts or obtain funds through arrangements with collaborators or others that may require us to relinquish rights to certain product candidates that we might otherwise seek to develop or commercialize independently.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Not applicable**.**

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain a system of disclosure controls and procedures, as defined in Exchange Act Rule 13a-15(e),which is designed to provide reasonable assurance that information, which is required to be disclosed in our reports filed pursuant to the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), is accumulated and communicated to management in a timely manner. At the end of the period covered by this report, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Exchange Act Rule 13a-15(b). Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this report were effective.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting in the second quarter of 2014 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

On May 9 and May 21, 2013, respectively, two purported class action lawsuits were filed in the U.S. District Court for the Southern District of New York against us, two of our executive officers and the lead underwriter of our initial public offering: Ted Davison, William Gould and Ray Lenci, Individually and on Behalf of All Others Similarly Situated , Plaintiffs v. Ventrus Biosciences, Inc., et al, 13CIV 3119; and Michael Bartley, Individually and on Behalf of All Others Similarly Situated , Plaintiffs v. Ventrus Biosciences, Inc., et al, 13CIV 3429.

The complaints have been brought as purported stockholder class actions, and, in general, include allegations that, during the class period between December 17, 2010 and June 25, 2012, we and our two executive officers violated Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and SEC Rule 10b-5 promulgated thereunder, and our two executive officers and the lead underwriter of our initial public offering violated Section 20(a) of the Exchange Act in making various statements related to our product, iferanserin (VEN 309), a topical treatment for symptomatic hemorrhoids, including but not limited to, the market for the product, the potential competitors, and the results of clinical trials, thereby inflating the price of our common stock. The complaints seek unspecified damages, interest, attorneys' fees, and other costs.

On July 8, 2013, three prospective lead plaintiffs filed motions to consolidate, appoint a lead plaintiff, and appoint lead counsel (the "Motions to Consolidate"). The Court took the Motions to Consolidate under submission on July 17, 2013. On July 23, 2013, the Court consolidated the actions and appointed lead plaintiffs and lead counsel. On September 16, 2013, lead plaintiffs filed a consolidated amended complaint. On November 22, 2013, we filed a motion to dismiss the consolidated amended complaint (the "Motion to Dismiss").

On May 5, 2014, the Court entered an order granting the Motion to Dismiss and dismissed the class action with prejudice. On May 19, 2014, lead plaintiffs filed a Motion for Reconsideration of the Court's order dismissing the class action with prejudice (the "Motion for Reconsideration"). On July 2, 2014, the Court entered an order denying the Motion for Reconsideration. Lead plaintiffs had until August 2, 2014 to file notice of an appeal, but no appeal was filed.

Item 1A. Risk Factors

Except as set forth below, there have been no material changes to the discussion of risk factors included in our most recent Annual Report on Form 10-K.

Failure to integrate Assembly Pharmaceutical, Inc. into our operations successfully could adversely affect our business.

On July 11, 2014, we effected a merger whereby Assembly Pharmaceuticals, Inc. became our wholly owned subsidiary. Our integration of the operations and personnel of Assembly Pharmaceuticals may require significant efforts, including significant amounts of management's time, and result in additional expenses. Factors that will affect the success of the merger include the strength of our combined technology, our ability to execute our business strategy, our ability to adequately fund research and development and retain key employees, and results of clinical trials, regulatory approvals and reimbursement levels of any approved product. Our failure to successfully manage the Assembly Pharmaceuticals merger could have a material adverse impact on our business. In addition, we cannot be certain that Assembly Pharmaceuticals' technology will be successfully developed or, if approved, become profitable or remain so.

Item 6. Exhibits

Exhibit Number	Description of Document	Registrant's Form	Dated	Exhibit Number	Filed Herewith
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1	Certification of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
32.2	Certification of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
101	Financials in XBRL format.				X

SIGNATURES

In accordance with the requirements of the Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Assembly Biosciences, Inc.

Date: August 14, 2014

By: /s/ Russell H. Ellison
Russell H. Ellison
Chief Executive Officer

Date: August 14, 2014

By: /s/ David J. Barrett
David J. Barrett
Chief Financial Officer

EXHIBIT 31.1

CERTIFICATION

I, Russell H. Ellison, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Assembly Biosciences, Inc.;

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.

Date: August 14, 2014

By: /s/ Russell H. Ellison
Russell H. Ellison
Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, David J. Barrett, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Assembly Biosciences, Inc.;

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.

Date: August 14, 2014

By: /s/ David J. Barrett
David J. Barrett
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED
PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Assembly Biosciences, Inc. (the "Company") for the period ended June 30, 2014 as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Russell H. Ellison, Chief Executive Officer, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of, and for, the periods presented in the Report.

/s/ Russell H. Ellison
Russell H. Ellison
Chief Executive Officer

August 14, 2014

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Assembly Biosciences, Inc. (the "Company") for the period ended June 30, 2014 as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, David J. Barrett, Chief Financial Officer, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of, and for, the periods presented in the Report.

/s/ David J. Barrett
David J. Barrett
Chief Financial Officer

August 14, 2014