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

FORM 10-Q

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

FOR THE QUARTERLY PERIOD ENDED: MARCH 31, 2014

☐ **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: 000-55016

Amarantus Bioscience Holdings, Inc
(Exact name of registrant as specified in its charter)

Nevada	**26-0690857**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

c/o Janssen Labs@QB3, 953 Indiana Street, San Francisco, CA 94085
(Address of principal executive offices)

(408) 737-2734
(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 (Section 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.

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 ☑

As May 20, 2014, the issuer had a total of 732,042,008 shares of common stock, $0.001 par value, outstanding.

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Amarantus Bioscience Holdings, Inc
(A Development Stage Company)
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)
(in thousands, except share and per share data)

	March 31, 2014	December 31, 2013
ASSETS		
Current assets:		
Cash and cash equivalents	$ 3,765	$ 1,033
Clinical trial material	500	-
Deferred funding fees, net	129	109
Prepaid expenses and other current assets	131	106
Total current assets	4,525	1,248
Property and equipment, net	8	-
Intangibles, net	1,338	611
Total assets	$ 5,871	$ 1,859
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable (includes related parties $438 and $490 as of March 31, 2014 and December 31, 2013, respectively)	1,744	972
Related party liabilities and accrued interest	249	248
Accrued expenses	223	292
Accrued interest	56	112
Demand promissory note	500	-
8% Senior convertible debentures, net of discount	178	932
Convertible promissory notes	114	124
Derivative liability	409	5,859
Total current liabilities	3,473	8,539
Total liabilities	3,473	8,539
Commitments and contingencies	-	-
Series D convertible preferred stock ($1,000 stated value; 1,300 shares designated; 1,299.327 issued and outstanding as of March 31, 2014 and December 31, 2013	839	839
Stockholders' equity (deficit)		
Convertible preferred stock, $0.001 par value — 10,000,000 shares authorized:		
Series A, $0.001 par value, 250,000 shares designated, -0- shares issued and outstanding as of March 31, 2014 and December 31, 2013	-	-
Series B, $0.001 par value, 3,000,000 shares designated, -0- shares issued and outstanding as of March 31, 2014 and December 31, 2013	-	-
Series C, $0.001 par value, 750,000 shares designated, 750,000 shares issued and outstanding as of March 31, 2014 and December 31, 2013	1	1
Common stock, $0.001 par value — 1,000,000,000 shares authorized; 729,680,790 and 574,171,945 shares issued and outstanding at March 31, 2014 and December 31, 2013, respectively	730	574
Additional paid-in capital	33,428	18,938
Accumulated deficit	(32,600)	(27,032)
Total stockholders' equity (deficit)	1,559	(7,519)
Total liabilities and stockholders' equity (deficit)	$ 5,871	$ 1,859

See notes to condensed consolidated financial statements.

Amarantus Bioscience Holdings, Inc
(A Development Stage Company)
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)
(in thousands, except share and per share data)

	Three Months Ended March 31,		Cumulative period From January 14, 2008 (Date of Inception) to March 31, 2014
	2014	2013 (Restated)	
Net sales	$ -	$ -	$ 416
Operating expense:			
Research and development	517	664	4,796
General and administrative	1,119	1,221	12,692
	1,636	1,885	17,488
Loss from operations	(1,636)	(1,885)	(17,072)
Other income (expense):			
Interest expense	(638)	(873)	(5,998)
Loss on issuance of common stock	(67)	-	(419)
Loss on issuance of warrants	(3,867)	-	(3,867)
Loss on issuance of debt	-	-	(6,709)
Other income (expense)	-	-	76
Change in fair value of warrants and derivative liabilities	666	(1,880)	1,820
Total other income (expense)	(3,906)	(2,753)	(15,097)
Net loss	(5,542)	(4,638)	(32,169)
Preferred stock dividend	26	-	64
Net loss applicable to common shareholders	$ (5,568)	$ (4,638)	$ (32,233)
Basic and diluted net (loss) per common share	$ (0.01)	$ (0.01)	
Basic and diluted weighted average common shares outstanding	630,720,618	368,215,835	

See notes to condensed consolidated financial statements.

Amarantus Bioscience Holdings, Inc

(A Development Stage Company)

CONDENSED CONSOLIDATED STATEMENTS STATEMENT OF STOCKHOLDERS' EQUITY (DEFICIT)

(Unaudited)

(in thousands, except share and per share data)

	Convertible Preferred Stock		Common Stock		Additional Paid-in	Deficit Accumulated during the Development	Total Stockholders' Equity
	Shares	Amount	Shares	Amount	Capital	Stage	(Deficit)
Balances as of December 31, 2013	750,000	$ 1	574,171,945	$ 574	$ 18,938	$ (27,032)	$ (7,519)
Common stock issued for services	—	—	2,500,000	2	182	—	184
Common stock issued for license	—	—	3,641,002	4	224	—	228
Common stock sold	—	—	4,000,000	4	396	—	400
Deferred funding costs charged to equity upon sale of common stock	—	—	—	—	(400)	—	(400)
Common stock issued for funding fees	—	—	6,000,000	6	510	—	516
Common stock issued upon conversion of 8% senior convertible debentures	—	—	77,405,866	78	3,013	—	3,091
Common stock issued in settlement of notes payable	—	—	1,095,759	1	10	—	11
Common stock issued for Series D convertible preferred stock dividend	—	—	866,218	1	25	—	26
Loss on issuance of common stock	—	—	—	—	67	—	67
Common stock issued upon exercise of common stock warrants	—	—	60,000,000	60	3,540	—	3,600
Deferred funding costs charged to equity upon exercise of warrants	—	—	—	—	(190)	—	(190)
Loss on issuance of warrants	—	—	—	—	3,867	—	3,867
8% senior convertible debentures converted and associated reclassification of derivative liability			—	—	3,044	—	3,044
Series D convertible preferred stock 8% dividend accrued at period end			—	—	—	(26)	(26)
Stock-based compensation expense	—	—	—	—	202	—	202
Net loss	—	—	—	—	—	(5,542)	(5,542)
Balances as of March 31, 2014	750,000	$ 1	729,680,790	$ 730	$ 33,428	$ (32,600)	$ 1,559

See notes to condensed consolidated financial statements.

Amarantus Bioscience Holdings, Inc
(A Development Stage Company)
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(in thousands)

	Three Months Ended March 31		Cumulative period From January 14, 2008 (Date of Inception) to March 31
	2014	2013 (Restated)	2014
Cash flows from operating activities			
Net loss	$ (5,542)	$ (4,638)	$ (32,169)
Adjustments to reconcile net loss to net cash used in operating activities			
Depreciation and amortization	1	-	34
Amortization of debt discount	500	476	2,924
Amortization of deferred financing fees	96	-	362
Amortization of intangibles	24	-	94
Stock issued for services	184	293	2,682
Loss on debt issuance	-	-	6,709
Loss on stock issuance	67	-	1,092
Loss on warrant issuance	3,867	-	3,867
Gain on disposal of equipment	-	-	(3)
Preferred stock Series C issued as compensation	-	-	39
Non-cash interest expense related to warrants and derivative	32	-	796
Common stock issued at conversion of Series A preferred stock	-	-	127
Gain on settlement of convertible note and warrants	-	-	(138)
Change in fair value of warrants and derivative liability	(666)	1,881	(1,815)
Stock-based compensation expense	202	508	2,011
Changes in assets and liabilities:			
Related party liabilities and accrued interest	1	-	(139)
Clinical trial material	(500)	-	(500)
Prepaid expenses and other current assets	(25)	202	(159)
Accounts payable	560	257	4,038
Accrued liabilities and accrued interest	(60)	81	683
Net cash used in operating activities	(1,259)	(940)	(9,465)
Cash flows from investing activities			
Acquisition of property and equipment	(9)	-	(49)
Acquisition of other assets	(500)	(35)	(625)
Security deposit write-off	-	1	(1)
Net cash used by investing activities	(509)	(34)	(675)
Cash flows from financing activities			
Proceeds from borrowings	500	1,200	8,219
Repayment of borrowings	-	(143)	(451)
Proceeds from issuance of common stock	400	-	2,198
Proceeds from exercise of warrants	3,600	-	3,600
Proceeds from issuance of stock options	-	-	201
Proceeds from issuance of convertible preferred stock	-	-	540
Net cash provided by financing activities	4,500	1,057	13,905
Net increase in cash and cash equivalents	2,732	83	3,765
Cash and cash equivalents			
Beginning of period	1,033	157	-
End of period	$ 3,765	$ 240	$ 3,765

Amarantus Bioscience Holdings, Inc
(A Development Stage Company)
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS, continued
(Unaudited)
(in thousands)

	Three Months Ended March 31		Cumulative period From January 14, 2008 (Date of Inception) to March 31
	2014	2013 (Restated)	2014
Supplemental schedule of non-cash activities:			
Bifurcation of derivatives embedded in convertible notes	$ -	$ -	$ 548
Beneficial conversion feature - Series D convertible preferred stock	$ -	$ -	$ 321
Beneficial conversion feature - debt discount - convertible promissory notes	$ -	$ -	$ 226
Relative fair value associated with senior secured convertible debentures issued with detachable warrants	$ -	$ -	$ 1,939
Convertible promissory notes converted and associated reclassification of derivative liability	$ -	$ -	$ 2,712
Convertible debentures converted and associated reclassification of derivative liabilities	$ 7,778	$ -	$ 7,778
Debt discount written off - associated with convertible promissory notes	$ (1,740)	$ -	$ (1,990)
Debt discount associated with convertible promissory notes - derivative liability	$ -	$ -	$ 813
Stock warrants reclassified from liabilities to equity	$ -	$ -	$ 39
Preferred stock issued in lieu of payment of payable	$ -	$ 250	$ 250
Preferred stock Series D issued for accounts payable	$ -	$ -	$ 1,169
Convertible promissory notes issued for payables and accrued liabilities	$ -	$ 15	$ 653
Convertible notes payable issued for accounts payables	$ -	$ -	$ 162
Issuance of warrants to investors	$ -	$ -	$ 371
Stock issued for deferred funding fees	$ 516	$ -	$ 547
Payables forgiven for property and equipment	$ -	$ -	$ 10
Stock issued to acquire intangible assets	$ -	$ 79	$ 556
Stock issued to satisfy accounts payable and accrued expenses	$ -	$ 527	$ 820
Stock issued for notes payable	$ -	$ -	$ 2,200
Stock issued for convertible debt	$ 11	$ 538	$ 2,435
Intrinsic value of beneficial conversion feature	$ -	$ -	$ 225
Reclassification of warrants to APIC	$ -	$ -	$ 2
Supplemental cash flow information			
Interest payments	$ -	$ -	$ 61

See notes to condensed consolidated financial statements.

1. GENERAL

Amarantus Bioscience Holdings, Inc. (the "Company") is a Nevada corporation that was formed to facilitate a merger with Amarantus BioScience, Inc., a Delaware corporation that was incorporated on January 14, 2008. The Company is a development stage biopharmaceutical drug development company dedicated to sourcing high-potential therapeutic platform technologies and aligning their development with complementary clinical-stage compounds to reduce overall enterprise risk. Through March 31, 2014, the Company has been primarily engaged in biotechnology research and development and raising capital to fund its operations.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

The unaudited condensed consolidated financial statements (Financial Statements) have been prepared by the Company pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC") and reflect all adjustments (consisting of normal recurring adjustments unless otherwise indicated) which, in the opinion of management, are necessary for a fair presentation of the results for the interim periods presented. Certain prior year amounts have been reclassified to conform to current year presentation.

Certain information in footnote disclosures normally included in the financial statements prepared in conformity with accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to the SEC rules and regulations for interim reporting. The financial results for the periods presented may not be indicative of the full year's results. The Company believes the disclosures are adequate to make the information presented not misleading.

These financial statements should be read in conjunction with the Company's audited consolidated financial statements and the notes thereto for the fiscal year ended December 31,, 2013 included in the Company's Annual Report on Form 10K filed in April 2014.

Significant Accounting Policies

There have been no material changes in the Company's significant accounting policies to those previously disclosed in the 2013 Annual Report.

Recently Issued Accounting Pronouncements

There have been no recent accounting pronouncements or changes in accounting pronouncements during the three months ended March 31, 2014, as compared to the recent accounting pronouncements described in the Company's Form 10-K for the year ended December 31, 2013, that are of significance, or potential significance, to the Company.

2. LIQUIDITY AND GOING CONCERN

The Company's activities since inception have consisted principally of acquiring product and technology rights, raising capital, and performing research and development. The Company is considered to be in the development stage as of March 31, 2014, as our principal commercial operations have not commenced. Successful completion of the Company's development programs and, ultimately, the attainment of profitable operations are dependent on future events, including, among other things, its ability to access potential markets; secure financing, develop a customer base; attract, retain and motivate qualified personnel; and develop strategic alliances. From inception, the Company has been funded by a combination of equity and debt financings.

The Company expects to continue to incur substantial losses over the next several years during its development phase. To fully execute its business plan, the Company will need to complete certain research and development activities and clinical studies. Further, the Company's product candidates will require regulatory approval prior to commercialization. These activities may span many years and require substantial expenditures to complete and may ultimately be unsuccessful. Any delays in completing these activities could adversely impact the Company. The Company plans to meet its capital requirements primarily through issuances of debt and equity securities and, in the longer term, revenue from product sales.

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP), which contemplate continuation of the Company as a going concern. As of March 31, 2014, the Company had cash and cash equivalents of approximately $3,765. During the three months ended March 31, 2014, the Company incurred a net loss of approximately $5,542 and had negative cash flows from operating activities of approximately $1,259. In addition, the Company had an accumulated deficit of approximately $32,600 at March 31, 2014. The Company believes its current capital resources are not sufficient to support its operations. Management intends to continue its research efforts and to finance operations of the Company through debt and/or equity financings. Management plans to seek additional debt and/or equity financing through private or public offerings or through a business combination or strategic partnership. There can be no assurance that the Company will be successful in obtaining additional financing on favorable terms, or at all. These matters raise substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of these uncertainties.

At March 31, 2014, the Company was in technical default on certain convertible notes with an aggregate principal balance outstanding of approximately $114, which was due prior to March 31, 2014.

3. RESTATEMENT OF PRIOR QUARTERS

In the fourth quarter of 2013, we discovered that some of the amounts we had previously reported in prior quarters had not been recorded correctly. The adjustments to correct for accounting differences were made in the fourth quarter of 2013 and are primarily related to our accounting for convertible note obligations.

The following table sets forth the effects of the restatement on affected items within our previously reported Condensed Consolidated Statement of Operations for the three months ended March 31, 2013.

	Three Months Ended March 31, 2013	
	As Reported	As Restated
Operating loss	$ (1,636)	$ (1,885)
Non-operating income (loss)	(3,906)	(2,753)
Net loss	(5,542)	(4,638)
Net loss per common share, basic and diluted	$ (0.01)	$ (0.01)

4. BALANCE SHEET DETAILS

Deferred funding fees:

	Period Ended	
	March 31, 2014	December 31, 2013
Total deferred funding fees	$ 266	$ 150
Amortization	(137)	(41)
Net deferred funding fees	$ 129	$ 109

The net deferred funding fees consist mainly of approximately $116 relating to the commitment fee paid to Lincoln Park Fund, LLC.

As of March 31, 2014, amortization expense for the next three years is expected to be as follows:

2014 (remaining nine months)	$ 48
2015	46
2016	35
Total	$ 129

Accrued liabilities:

	Period Ended	
	March 31, 2014	December 31, 2013
Accrued compensation and related benefits	$ 197	$ 267
Series D Convertible Preferred dividend payable	26	26
Total	$ 223	$ 293

Related party liabilities:

	Period Ended	
	March 31, 2014	December 31, 2013
Promissory note	$ 222	$ 222
Accrued interest	27	26
Total	$ 249	$ 248

This promissory note dated March 5, 2008 is due and payable March 5, 2015 and carries an annual interest rate of 2%. At the option of the Company, the This note and the accrued interest owed can be converted to the common stock of the Company based on the closing price on the day of the conversion as quoted on the exchange on which the Company's common stock is listed. The conversion price as at March 31, 2014 was $0.0775 and would convert to approximately 3,213,000 shares.

5. FAIR VALUE MEASUREMENTS

The Company's financial assets and liabilities that are measured at fair value on a recurring basis as of March 31, 2014 and December 31, 2013, by level within the fair value hierarchy, are as follows:

Fair Value Measurements at March 31, 2014

	Level 1	Level 2	Level 3	Total
Derivative Liability	$ —	$ —	$ 409	$ 409

Fair Value Measurements at December 31, 2013

	Level 1	Level 2	Level 3	Total
Derivative Liability	$ —	$ —	$ 5,859	$ 5,859

For certain convertible note obligations, the Company is required to measure and record a related derivative liability, representing the estimated fair value of any embedded conversion options. The following table provides a summary of changes in the fair value of the Company's Level 3 financial liabilities from December 31, 2013 to March 31, 2014:

Debenture issuance date	October 2, 2013	October 2, 2013	September 6, 2013	October 2, 2013	October 2, 2013	September 6, 2013	October 2, 2013	September 6, 2013	October 2, 2013	October 2, 2013	September 6, 2013	October 2, 2013	October 2, 2013	Total
Number of shares issued (000 omitted)	2,778	2,083	16,667	10,083	1,028	7,500	139	6,806	3,750	13,264	3,889	5,208	1,667	
Debenture principal	$ 111	$ 83	$ 667	$ 403	$ 41	$ 300	$ 6	$ 272	$ 150	$ 531	$ 156	$ 208	$ 67	$ 2,995
Fair value of debenture at conversion date (1)	$ 204	$ 115	$ 1,333	$ 811	$ 46	$ 498	$ 9	$ 388	$ 171	$ 591	$ 220	$ 301	$ 97	$ 4,784

Date of valuation (conversion)	October 2, 2013	February 20, 2014	January 30, 2014	January 30, 2014	March 31, 2014	February 5, 2014	February 10, 2014	March 6, 2014	March 20, 2014	March 31, 2014	February 12, 2014	February 12, 2014	March 4, 2014
Dividend yield (per share)	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**
Exercise price	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04
Volatility (annual)	**134%**	**136%**	**136%**	**132%**	**133%**	**138%**	**134%**	**134%**	**131%**	**133%**	**134%**	**134%**	**132%**
Risk-free rate	**0.07%**	**0.08%**	**0.06%**	**0.0006**	**0.0009**	**0.0007**	**0.001**	**0.0008**	**0.0009**	**0.0007**	**0.0009**	**0.009**	**0.0008**
Remaining life (years)	**0.66**	**0.61**	**0.60**	**0.67**	**0.51**	**0.58**	**0.64**	**0.50**	**0.54**	**0.51**	**0.56**	**0.64**	**0.58**

The following table are the Level 3 Weighted Average reports associated with the derivative liabilities at March 31, 2014:

Exercise Price	$ 0.04
Volatility	129.00%
Risk-free Rate	0.07%
Contractual Life	0.50
Dividend Yield	0.0%

	Derivative Liability
December 31, 2013	$ 5,859
Conversion of 8% senior convertible debentures to common stock [1]	(4,784)
Change in fair value	(666)
March 31, 2014	$ 409

(1) The $4,784 was included with the debt discount in the statement of equity as result of the conversions of the convertible debt.

6. NET LOSS PER SHARE

The following table sets forth the computation of the basic and diluted net loss per share attributable to Amarantus common stockholders for the periods indicated:

	For the Three Months Ended March 31,	
	2014	**2013** (restated)
Numerator		
Net loss	$ (5,542)	$ (4,638)
Preferred stock dividend	26	—
Net loss applicable to common stockholders	$ (5,568)	$ (4,638)
Denominator		
Weighted average shares outstanding during the period:		

	For the Three Months Ended March 31,	
	2014	2013 (restated)
Common stock - basic	630,720,618	368,215,835
Common shares equivalents	—	—
Common stock - diluted	630,720,618	368,215,835
Net loss per share	$ (0.01)	$ (0.01)

Potentially dilutive securities:		
Outstanding time-based common stock options[1]	14,296,000	-(2)
Outstanding performance-based and market-based common stock options[1]	4,000,000	-(2)
Outstanding time-based preferred stock options[1]	2,488,000	-(2)
Warrants[1]	69,553,000	-(2)
Related party liability[1]	3,214,000	-(2)
Convertible promissory note(s)[1]	5,655,000	-(2)
8% Senior convertible debentures	8,776,000	-(2)
Convertible preferred stock[1] [3]	751,000	-(2)

(1) The impact of time-based, performance-based and market-based stock options, time-based restricted stock units, warrants, the convertible notes and the convertible preferred stock on earnings per share is anti-dilutive in a period of loss from continuing operations.
(2) Total anti dilutive securities for the 3 months ended March 31, 2013 was approximately 71,000,000.
(3) Includes convertible preferred Series C and D.

7. INTANGIBLE ASSETS

The following table summarizes our intangible assets:

	Period Ended	
	March 31, 2014	December 31, 2013
Intangible assets:		
Licenses	$ 1,431	$ 681
Accumulated amortization	(93)	(70)
Total intangible assets net	$ 1,338	$ 611

These license costs will be amortized over the expected remaining lives of the respective patents. As of March 31, 2014, amortization expense for the next five years is expected to be as follows:

2014 (remaining nine months)	$ 78
2015	102
2016	102
2017	102
2018	102
thereafter	852
Total	$ 1,338

Eltoprazine License

On January 10, 2014, the Company entered into a license agreement with PGI Drug Discovery, LLC ("PGI"), which granted the Company an exclusive license (with a right to sublicense) to utilize certain licensed compounds and licensed products of PGI, which includes certain intellectual property and know how covering the use of Eltoprazine and certain of its related compounds in all therapeutic indications.

The Company has agreed to: (i) pay PGI $100 in cash for the License within 20 days of the execution of the License Agreement, (ii) pay a research support payment to PGI as partial reimbursement for costs incurred for earlier research totaling up to $650 to be paid in a mixture of cash and stock, (iii) reimburse PGI for the Eltoprazine clinical trial material up to $500 payable upon the earlier of the initiation of a Phase IIb clinical study or 6 months after the date of the License Agreement, and (iv) pay PGI up to an aggregate of $4,000 in development milestones through NDA submission. As further consideration for the License Agreement, the Company shall pay an 8% royalty to PGI of the annual aggregate net sales by the Company.

Simultaneous with the execution of the license agreement, the Company and PGI entered into a services agreement pursuant to which PGI will provide certain services to the Company related to PGI's proprietary analytical systems as will be set forth in certain study plans. The Company agreed to a payment commitment of $450 at a minimum annual rate of $150 for each of three years. The Services

Agreement is for a term of the later of 3 years or the completion of any study plan accepted by the parties under the services agreement.

As of March 31, 2014, as a result of the arrangement described above, the Company recorded the following: (i) $500 in cash payments along with 4,000,000 shares of common stock valued at $250 as an intangible asset, (ii) $500 as an asset related to the transferred clinical trial material, and (iii) liabilities of $500 to be paid to PGI for the clinical trial material and $22 for unissued shares.

8. 8% SENIOR CONVERTIBLE DEBENTURES

The following table summarizes the Company's outstanding 8% convertible promissory note obligations:

Issue Date	Maturity Date	Stated Interest Rate	Conversion Terms	Principal Balance Outstanding March 31, 2014	Principal Balance Outstanding December 31, 2013
10/2/2013	10/2/2014	8.0%	Variable conversion price currently at $0.04	$ 150	$ 1,789
9/6/2013	9/6/2014	8.0%	Variable conversion price, currently at $0.04	189	1,544
	Sub total			**339**	**3,333**
	Discount			**(161)**	**(2,401)**
	Current portion of 8% convertible promissory notes, net of debt discount			$ 178	$ 932

During the three months ended March 31, 2014 approximately $3,091, consisting of approximately $2,995 of debentures and approximately $96 of accrued interest of the 8% senior convertible debentures, converted to 77,405,866 shares of common stock of the Company. Additionally, $1,740 of the 8% senior convertible debentures related debt discount was reclassified from liability to additional paid in capital.

The Company entered into a registration rights agreement with the Investors pursuant to which the Company filed a registration statement with the Securities and Exchange Commission. The registration statement went effective February 4, 2014.

9. CONVERTIBLE PROMISSORY NOTES

The following table summarizes the Company's outstanding convertible promissory note obligations:

Issue Date	Maturity Date	Stated Interest Rate	Conversion Terms	Principal Balance Outstanding March 31, 2014	Principal Balance Outstanding December 31, 2013
6/5/2013	**12/2/2013**	**6.0%**	**Fixed at $0.02**	**20**	**20**
11/4/2012	**5/3/2013**	**6.0%**	**Fixed at $0.01**	**-**	**10**
8/23/2012	**2/19/2013**	**6.0%**	**Fixed at $0.015**	**50**	**50**
11/2012	**On Demand**	**None**	**Refundable excess payment**	**1**	**1**
6/6/2011	**6/6/2013**	**5.0%**	**Variable at $0.04**	**10**	**10**
4/11/2011	**4/11/2013**	**5.0%**	**Variable at $0.04**	**25**	**25**
5/1/2011	**5/1/2013**	**5.0%**	**Fixed at $0.10**	**4**	**4**
4/1/2011	**4/1/2013**	**5.0%**	**Fixed at $0.10**	**4**	**4**
	Total convertible promissory notes			**$ 114**	**$ 124**

Convertible notes converted to common stock

On February 10, 2014 Robert L. Harris, a member of the Board of Directors, converted his $10 note and $1 accrued interest into 1,095,759 shares of restricted common stock.

Convertible notes in default

At March 31, 2014, the Company was in technical default on certain convertible notes with an aggregate principal balance outstanding of approximately $114,which was due prior to March 31, 2014.

10. DEMAND PROMISSORY NOTE

On February 14, 2014, the Company executed a Demand Promissory Note payable to Dominion Capital, LLC in the amount of $500 at an annual interest rate of 12% compounded monthly until the note is repaid. On March 12, 2014, , the Company elected to extend the maturity of the Note from March 14, 2014 to August 14, 2014.

11. COMMITMENTS AND CONTINGENCIES

Commitments:

Lease Arrangements — The Company leases its main office facility and laboratory space in San Francisco, CA under a one-year lease agreement with QB3 Incubator Partners, LP. The lease agreement was entered into in October 2013 and provides for rental payments of approximately $7 per month.

Rent expense for the three months ended March 31, 2014 and 2013 was approximately $21 and $8, respectively.

The Company and PGI entered into a services agreement pursuant to which PGI will provide certain services to the Company related to PGI's proprietary analytical systems (refer to Note INTANGABLE ASSETS). The Company agreed to a payment commitment of $450 at a minimum annual rate of $150, for each of three years. The Services Agreement is for a term of the later of 3 years or the completion of any study plan accepted by the parties under the services agreement.

Pursuant to the December 12, 2013 license agreement between the Company and the University of Massachusetts, the Company is required to pay an annual license maintenance fee of $15 as long as the agreement remains in effect and the related patents remain valid. The Company is also obligated to reimburse the university for all patent costs incurred that are related to the licensed patents for the duration of the agreement term.

Contingencies :

On January 10, 2014, the Company entered into a license agreement ("PGI License Agreement") with PGI Drug Discovery, LLC ("PGI"). Pursuant to the terms of the agreement, the Company agreed to pay PGI up to an aggregate of $4,000 in development milestones through NDA submission. Milestone based payments payable by the Company under the PGI License Agreement are as follows: (i) $1,000 upon successful completion of the first Phase 2b clinical study, and (ii) $3,000 million upon submission of a New Drug Application with the United States Food and Drug Administration or a comparable submission outside of the United States.

Pursuant to the LPC Purchase Agreement (refer to Note COMMON STOCK PRIVATE PLACEMENTS), the Company may be required to issue up to 3,500,000 shares of common stock to LPC on a pro rata basis if and when the Company utilizes funding available under the agreement.

Pursuant to the MDx Purchase Agreement (refer to Note SUBSEQUENT EVENTS) and contingent upon (i) the Company entering into a direct licensing agreement with the University of Leipzig ("Leipzig") pursuant to which Leipzig would grant the Company a direct license to certain assets now licensed to MDx by Leipzig, and (ii) MDx terminating the license agreement it currently holds with Leipzig with the Company's prior written consent, the Company has agreed to issue to MDx 6,500,000 shares of the Company's common stock and will provide MDx with piggy-back registration rights as it relates to such shares.

Pursuant to the December 12, 2013 license agreement between the Company and the University of Massachusetts, the Company is obligated to pay the university certain amounts in the event certain events occur or milestones are achieved. Milestones to be paid under the agreement are as follows: (i) $50 upon first human dosing, (ii) $75 upon initiation of first Phase 2 clinical trial, (iii) $100 upon initiation of first Phase 3 clinical trial, and (iv) $500 upon first product approval in the United States. Following commercial launch, the Company is required to pay a royalty to the university equal to 2% of net sales, as defined under the agreement, subject to certain royalty minimums ranging from $125 to $500 per year. The Company is also obligated to pay to the university 10% of any sub-license income generated under the agreement.

The Company is in technical default of certain convertible notes that were due prior to March 31, 2014, and is also late with regard to making payments to various trade account vendors for goods and services received. Presently the Company is not aware of any accounts that have been turned over to collection agencies or that might result in a lawsuit with the Company.

12. COMMON STOCK WARRANTS

Stock Warrants

The Company issued 83,333,251 Warrants in 2013 in connection with the Debenture and Warrant transaction. The Warrants are exercisable for a term of three years from the date of issuance at an exercise price of $0.06 per share. The Warrants are exercisable on a cashless basis if at any time after the six months anniversary there is no effective registration statement or current prospectus available for the resale of the shares underlying the Warrants. The Company may call the warrants at an exercise price of $.001 per share if certain conditions as described in the Warrant are met. On February 4, 2014, the Company registered these warrants with the SEC.

On March 7, 2014, the Company accepted elections by warrant holders to exercise certain warrants in the aggregate amount of 60,000,000 shares of common stock for gross proceeds of $3,600. Pursuant to the offer to exercise dated February 13, 2014 as supplemented on March 6, 2014, the holders of outstanding warrants to purchase shares of common stock of the Company at a price of $0.06 (the "Original Warrants") were offered the opportunity to exercise their Original Warrants and receive warrants (the "New Warrants") to purchase three (3) shares of common stock of the Company for every four (4) Original Warrants exercised. The New Warrants are exercisable at any time at a price of $0.12 for a term of five (5) years. The New Warrants are callable by the Company if the Volume Weighted Average Price (VWAP) of the Company's common stock for each of 20 consecutive trading days exceeds $0.18 and certain equity conditions are met. The Company may also call the New Warrants if the closing price of the Company's common stock exceeds $0.18 on the date that is the earlier of the receipt by the Company of an approval letter for listing of the Company's common stock on an exchange or actual listing of the common stock on an exchange. The holders of the New Warrants have piggy back – registration rights. Upon the closing of the offer to exercise the Company issued New Warrants to purchase 45,000,000 shares of common stock of the Company.

In accordance with ASC 815-40-25-10 the Company determined that the appropriate accounting treatment of the New Warrants is to determine the Black-Scholes value of the warrant and to record the fair value of the warrant as a loss upon Issuance of Warrants in the Other income (expense) section of the statement of operations along with a credit to Additional paid-In capital. The fair value was determined to be approximately $3,867, using the Black-Scholes model with the following weighted average assumptions at issuance:

Annualized volatility [(1)]	305%
Contractual term	5.0
Risk-free investment rate	1.65%
Dividend yield	0.0%

(1) - The Company has three years of trading history that was utilized in computing the annualized volatility as of the date of issuance.

The following table summarizes the Company's warrant activity for the three months ended March 31, 2014.

	Number of Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding warrants as of December 31, 2013	**84,553,306**	**0.06**	**2.7**
Exercised	(60,000,000)	0.06	2.7
Issued as a result of the above exercise	45,000,000	0.12	4.9
Outstanding warrants as of March 31, 2014	**69,553,306**	**0.10**	**4.0**

13. COMMON STOCK PRIVATE PLACEMENTS

On March 7, 2014, the Company entered into an equity financing agreement ("LPC Purchase Agreement") with Lincoln Park Capital Fund LLC ("LPC") whereby LPC is obligated to purchase up to $20,000 of the Company's common stock from time to time over a 30 month period, as directed by the Company and subject to certain requirements, restrictions and limitations. Under the agreement, the per share purchase price will be the lesser of (1) the lowest sale price of common stock on the purchase date and (2) the average of the three lowest closing purchase prices during the 10 consecutive business days prior to the purchase date. However, LPC is not obligated to purchase shares from the Company on any date that the closing price of the common stock is below $0.04, subject to adjustment upon the occurrence of certain stock related events. The Company may also request that LPC purchase shares under an accelerated purchase notice whereby the per share purchase price will be the lower of (i) 94% of a volume weighted average price calculation as determined under the agreement or (ii) the closing price of the common stock on the accelerated purchase date.

In consideration for entering into the agreement, the Company agreed to issue 9,500,000 shares of common stock to LPC, 6,000,000 of which were issued upon entering into the agreement and 3,500,000 of which are contingently issuable on a pro rata basis as the Company utilizes the financing arrangement. The agreement will automatically terminate upon the earliest of 30 months or upon full utilization of the purchase commitment.

Pursuant to the agreement, the Company sold an initial 4,000,000 shares to LPC for an aggregate gross purchase price of $400. The fair value of the 6,000,000 shares provided to LPC was approximately $516 and was treated as a deferred funding fee. $400 was considered a placement fee against the $400 raised pursuant to execution of the LPC Purchase Agreement. The remaining $116 of deferred funding fees will be offset against future capital raises.

14. STOCK OPTION PLANS

2008 Stock Plan

The Company's Board of Directors approved the 2008 Stock Plan (the "Plan"). Under the Plan, the Company may grant up to 38,242,127 options, including 10,000,000 the Board added to the plan in January, of incentive stock options, nonqualified stock options, or stock awards to eligible persons, including employees, nonemployees, members of the Board of Directors, consultants, and other independent advisors who provide services to the Company. In general, options are granted with an exercise price equal to the fair value of the underlying common stock on the date of the grant. Options granted typically have a contractual life of 10 years and vest over periods ranging from being fully vested as of the grant date to four years.

The following table is a summary of activity under the Plan:

	Common Stock options outstanding	Weighted Average Exercise Price	Outstanding Options Common Weighted Average Remaining Contractual Term
Balance – December 31, 2013	6,941,288	0.05	9.0
Options granted (weighted-average fair value of $0.057)			
Employee	8,200,000	0.08	10.0
Non-Employee	3,154,839	0.08	10.0
Options cancelled	—	—	—
Options Exercised	—	—	—
Balance –March 31, 2014	18,296,127	0.07	9.5
Options vested as of March31, 2014	8,774,622		

The 8,200,000 shares granted to Employees include 8,000,000 shares granted to the Company's new Chief Financial Officer (See Note, Subsequent Events), 4,000,000 of which are time-based and vest 25 percent upon grant and 1/36 per month thereafter during continued service; 2,000,000 of which are performance-based and vest upon continued service and achievement of a specific goal; and 2,000,000 of which are market-based and vest upon continued service and the Company's achievement of certain stock price targets. All of the 8,000,000 shares are at an exercise price of $0.0775 and were granted on March 31, 2014.

During the three months ended March 31, 2014, the Company granted stock options and awards that were greater than the shares authorized, resulting in a deficit of shares available in the Plan of 3,231,221 as of March 31, 2014. The Company expects the Board of Directors will authorize additional shares for the Plan by June 2014 to offset the deficit.

2012 Preferred Stock Plan

In July 2012, our Board of Directors adopted a new stock plan, the Management, Employee, Advisor and Director Preferred Stock Option Plan – 2012 Series B Convertible Preferred Stock Plan ("Preferred Stock Plan"). The purposes of the Preferred Stock Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Management, Employees, Advisors and Directors and to promote the success of our business. These options currently vest over two or three years and cannot be converted into common shares or sold for two years from the date of the Designation of the Series B Preferred shares. Each share of Series B Preferred stock converts into fifty shares of common stock. The following table is a summary of activity under the Preferred Stock Plan:

	Preferred Stock Options Outstanding	Weighted Average Exercise Price	Outstanding Preferred Options Weighted Average Remaining Contractual Term
Balance – December 31, 2013	2,287,500	0.47	8.5
Preferred options cancelled	—	—	—
Preferred options granted (weighted-average fair value of $1.61)			
Employee	200,000	2.21	9.8
Non-Employee	—	—	—
Balance – March 31, 2014	2,487,500	0.61	8.6
Preferred options vested as of March 31, 2014	1,482,161		

Convertible preferred stock, $0.001 par value — 10,000,000 shares authorized, Series B, $0.001 par value:

As of March 31, 2014, Convertible preferred stock, $0.001 par value — 10,000,000 shares authorized, Series B, $0.001 par value, indicates 3,000,000 shares designated, but the Company's Form 10-K for the year ended December 31, 2013 indicates 2,500,000 shares designated. The Company's Form 10-K for the year ended December 31, 2013, did not include the increase of 500,000 designated shares approved by the Board of Directors on November 20, 2013. This oversight has no effect on any of the financial information presented in the Company's Form 10-K for the year ended December 31, 2013.

Stock-based compensation expense for all plans is classified in the statements of operations as follows:

	Three Months Ended March 31,	
	2014	2013
Research and development	$ 78	$ 282
General and administrative	124	226
Total	$ 202	$ 508

At March 31, 2014, there was a total of approximately $1,043 of unrecognized compensation cost, net of estimated forfeitures of zero, as the Company has not experienced any forfeitures to date, related to non-vested stock option awards, which is expected to be recognized over a weighted-average period of approximately 2.5 years.

The fair value of the Company's stock-based awards during the three months ended March 31, 2014 and 2013 were estimated using the Black-Scholes option-pricing model with the following assumptions:

	Three Months Ended March 31,	
	2014	**2013**
Weighted-average volatility	89.2%	108.0%
Weighted-average expected term	5	5
Expected dividends	0%	0%
Risk-free investment rate	1.65%	0.5%

15. RELATED-PARTY TRANSACTIONS

On February 10, 2014 Robert L. Harris, a member of the Board of Directors, converted his $10 note and $1 accrued interest into 1,095,759 shares of restricted common stock.

16. SUBSEQUENT EVENTS

Appointment of the Company's New Chief Financial Officer

On April 1, 2014, Robert Farrell, J.D. was appointed to serve as the Company's Chief Financial Officer. Mr. Marc Faerber, the former CFO, will now serve as the Company's Corporate Controller and Vice President of Financial Operations.

Mr. Farrell served as Chief Financial Officer of Titan Pharmaceuticals from 1996 to 2008, and as President and CEO from 2008 to 2010. During his tenure at Titan Mr. Farrell was responsible for all SEC filings, fund raising, financial and tax planning strategies, mergers and acquisitions, corporate partnerships, licensing transactions and financial operations. Mr. Farrell most recently served as CFO at Sanovas, Inc. Mr. Farrell previously served as CFO, Corporate Group Vice President and General Counsel at Fresenius USA and Fresenius Medical Care. Mr. Farrell also previously served as the CFO for the Institute for One World Health in San Francisco and currently serves on the Board of Directors of Prime Genomics, Inc. Mr. Farrell holds a J.D. from the University of California's Hastings School of Law.

Mr. Farrell will initially be engaged as a contract consultant but is expected to be a full-time employee by the end of June 2014 upon execution of an employment agreement.

Asset purchase agreement with Memory Dx, LLC

On April 29, 2014, the Company entered into an asset purchase agreement ("MDx Purchase Agreement") with Memory Dx, LLC ("MDx"), pursuant to which the Company purchased all of the assets of MDx, including all right, title and interest in the LymPro Technology, (as defined in the MDx Purchase Agreement). Such assets include all intellectual property, goodwill, patents and all copyrights owned by MDx, subject to certain exclusions as further described in the MDx Purchase Agreement.

As consideration for transfer of the assets, the Company agreed to pay to MDx (i) $50 upon execution of the MDx Purchase Agreement, (ii) $50 upon the date 60 days after execution of the MDx Purchase Agreement, and (iii) $50 on the date 120 days after execution of the MDx Purchase Agreement. Additionally, the Company agreed to issue to MDx upon delivery of the assets, 1,500,000 shares of the Company's common stock and provide MDx with piggy-back registration rights as it relates to such shares.

Contingent upon (i) the Company entering into a direct licensing agreement with the University of Leipzig ("Leipzig") pursuant to which Leipzig would grant the Company a direct license to certain assets now licensed to MDx by Leipzig, and (ii) MDx terminating the license agreement it currently holds with Leipzig as it relates to such licensed assets with the Company's prior written consent, the Company has agreed to issue to MDx 6,500,000 shares of the Company's common stock and will provide MDx with piggy-back registration rights as it relates to such shares. The previous laboratory services agreement entered into between Amarantus and MDx on April 2, 2013 was terminated following execution of the MDx Purchase Agreement.

Asset purchase agreement with Provista Diagnostics, Inc.

On May 1, 2014, the Company entered into an asset purchase agreement with Provista Diagnostics, Inc. ("PDI") to acquire certain assets related to fluorescently activated cell sorter (FACS) related equipment, software and data. In exchange for these assets, the Company agreed to pay to PDI a one-time payment of $20.

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

Forward-Looking Statements

Amarantus Bioscience Holdings, Inc.("the Company") is a California-based development-stage biopharmaceutical company founded in January 2008. We focus on developing our intellectual property and proprietary technologies to develop drug and diagnostic product candidates to treat human disease. We own or have exclusive licenses to various product candidates in the biopharmaceutical and diagnostic areas of the healthcare industry, with a specific focus on bringing these candidates to market in the areas of Alzheimer's disease, Parkinson's disease, Retinal Degenerative disorders, and other ailments of the human body, with a particular focus on the nervous system. Our business model is to develop our product candidates through various de-risking milestones that we believe will be accretive to shareholder value and strategically partner with biopharmaceutical companies, diagnostic companies, investors, private foundations and other key stakeholders in the specific sub-sector of the healthcare industry in which we are developing our products in order to achieve regulatory approval in key jurisdictions and thereafter successfully market and distribute our products.

Overview

The Company's philosophy is to acquire, in-license, discover and develop drug candidates and diagnostics with the potential to address critically important biological pathways involved in human disease.

LymPro Test ®

The Lymphocyte Proliferation Test ("LymPro Test ®", or "LymPro") is a diagnostic blood test for Alzheimer's disease originally developed by the University of Leipzig in Germany. The test works by evaluating the cell surface marker CD69 on peripheral blood lymphocytes following a mitogenic stimulation. The underlying scientific basis for LymPro is that Alzheimer's patients have a dysfunctional cellular machinery that inappropriately allows mature neurons in the brain to enter the mitotic process (cell division /cell cycle). When this happens the neurons start the cell division process, but cannot complete that process. As a result, a number of cytokines and other genes are upregulated, ultimately leading to cell death by apoptosis. This inappropriate cell division activation process is also present in the lymphocytes of Alzheimer's patients, as lymphocytes share a similar cellular division machinery with brain neurons. We measure the integrity of this cellular division machinery process by measuring CD69 upregulation in response to the mitogenic stimulation. If CD 69 is upregulated it means that the cellular division machinery process is correct and Alzheimer's is not present. If CD69 is not upregulated, it means there is a dysfunctional cellular division machinery process, and Alzheimer's is more likely. To date, data has been published in peer-reviewed publications on LymPro with 160 patients, demonstrating 92% co-positivity and 91% co-negativity with an overall 95% accuracy rating for LymPro.

Eltoprazine

Eltoprazine is a small molecule drug candidate that is a selective partial agonist on the 5HT1-A and 5HT1-B receptors of the serotonergic system in the brain originally discovered and developed by Solvay Pharmaceuticals (now Abbvie). The serotonergic system has been associated with a wide range of disorders motor and behavioral disorders including aggression, cognition, attention and control. The Company is developing Eltoprazine for the treatment of the primary side effect of current Parkinson's disease medication Levadopa-Induced Dyskinesia ("PD LID"), as well as Adult Attention Deficit Hyperactivity Disorder ("Adult ADHD"). To date, over 700 patients have been dosed with Eltoprazine at varying doses as high as 30mg; the active dose in both PD LID and Adult ADHD is 5mg. Primary and secondary endpoints have been met for Eltoprazine in Phase 2 trials in PD LID and Adult ADHD

MANF

Mesencephalic Astrocyte-derived Neurotrophic Factor ("MANF") is an endogenous, evolutionally conserved and widely expressed protein that was discovered by the Company's Chief Scientific Officer Dr. John Commissiong. MANF acts on a variety of molecular functions, including as a part of the endoplasmic reticulum stress response ("ER-SR") system of the unfolded protein response ("UPR"). MANF has demonstrated efficacy as a disease-modifying treatment in various animal models, including Parkinson's disease, retinitis pigmentosa, cardiac ischemia and stroke. The Company has made a strategic decision to focus the development of MANF in orphan indications and is currently evaluating the most appropriate indication for development based on data currently being assembled internally, by contract research organizations and academic collaborators.

Other

Exploration of the Company's PhenoGuard platform for neurrotrophic factor discovery and discovery and evaluation of external drug candidates for potential in-licensure or acquisition.

For the next 12 months, the Company intends to focus primarily on the commercialization of LymPro, the further clinical development of Eltoprazine, and the preclinical development of MANF.

The Three Months Ended March 31, 2014 compared to Three Months Ended March 31, 2013

During the three months ended March 31, 2014 and 2013, we generated no revenue.

Research and development costs for the three months ended March 31, 2014 (the "Current Quarter") decreased $147 to $517 from $664 for the three months ended March 31, 2013 (the "Prior Year Quarter") due to reduced stock-based compensation expenses in the Current Quarter.

General and administrative expenses decreased $102 to $1,119 for the Current Quarter from $1,221 for the Prior Year Quarter primarily due to decreased spending on consulting and other professional services as well as decreased stock-based compensation expenses.

For the Current Quarter, Other income (expense) increased $1,153 to an expense of $3,906 from $2,753 in the Prior Year Quarter. Interest expense decreased $235 to $638 for the Current Quarter from $873 for the Prior Year Quarter primarily due to lower financing costs on new debt in the Current Quarter than in the Prior Year Quarter.

In the Current Quarter there is a $3,867 charge related to the issuance of new warrants offset by a gain of $666 in change in fair value of derivative liability. In the Prior Year Quarter there was no charge related to the issuance of warrants, and the change in fair value of warrants and derivatives was an expense of $1,820.

Net loss for the Current Quarter was $5,542 as compared to a net loss of $4,638 for the Prior Year Quarter. Stock based compensation from grants under the 2008 Stock Plan and the 2012 Series B Convertible Preferred Stock Option Plan accounted for $202 of the $5,732 net loss for the Current Quarter and $508 of the $4,638 net loss for the Prior Year Quarter.

Inflation adjustments have had no material impact on the Company.

Liquidity and Capital Resources

As of March 31, 2014, the Company had total current assets of $4,525 consisting of $3,765 in cash and cash equivalents and $500 in clinical trial material, $131 in prepaid expenses and other current assets, and $129 in deferred funding fees. As of March 31, 2014, the Company had current liabilities in the amount of $3,473, consisting of:

Accounts payable	$	1,744
Related party liabilities and accrued interest	$	249
Accrued expenses	$	223
Accrued interest	$	56
Demand promissory note	$	500
8% Senior convertible debentures, net of discount	$	178
Convertible promissory notes	$	114
Derivative liability	$	409

As of March 31, 2014, the Company had a working capital surplus in the amount of $1,052 compared to a deficit of $7,291 at December 31, 2013.

The table below sets forth selected cash flow data for the periods presented:

	Three Months Ended March 31,	
	2014	2013 (restated)
Net cash (used in) operating activities	$ (1,259)	$ (940)
Net cash (used in) investing activities	(509)	(34)
Net cash provided by financing activities	4,500	1057
Net increase (decrease) in cash and cash equivalents	$ 2,732	$ 83

The success of our business plan during the next 12 months and beyond is contingent upon us generating sufficient revenue to cover our costs of operations, or upon us obtaining additional financing. Should our revenues be less than anticipated, or should our expenses be greater than anticipated, then we may seek to obtain business capital through the use of private and public equity fundraising or shareholder loans. There can be no assurance that such additional financing will be available to us on acceptable terms, or at all. Similarly, there can be no assurance that we will be able to generate sufficient revenue to cover the costs of our business operations. We will use all commercially-reasonable efforts at our disposal to raise sufficient capital to run our operations on a go forward basis.

Off Balance Sheet Arrangements

Not applicable

Going Concern

We are a development stage company engaged in biotechnology research and development. We have suffered recurring losses from operations since inception, we have a positive working capital but have generated negative cash flow from operations. There is substantial doubt about our ability to continue as a going concern.

Item 4. Controls and Procedures

We carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of March 31, 2014. This evaluation was carried out under the supervision and with the participation of Gerald Commissiong, our Principal Executive Officer, and Marc E. Faerber, our Principal Accounting Officer. Based upon that evaluation, our Chief Executive Officer and Principal Accounting Officer concluded that, as of March 31, 2014, our disclosure controls and procedures were ineffective as of the end of the period covered, due to the following material weaknesses which are indicative of many small companies with small staff: (i) inadequate segregation of duties and effective risk assessment; and (ii) insufficient written policies and procedures for accounting and financial reporting with respect to the requirements and application of both United States generally accepted accounting principles and Securities and Exchange Commission guidelines. Management anticipates that such disclosure controls and procedures will not be effective until the material weaknesses are remediated. We will be unable to remediate the material weakness in our disclosure controls and procedures until we can hire additional employees. Management will be addressing the internal controls issues in the coming months.

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act are recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is accumulated and communicated to management, including our Principal Executive Officer, and Principal Financial Officer, to allow timely decisions regarding required disclosure.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

The Company is not currently involved in any litigation that it believes could have a material adverse effect on its financial conditions and result of operations.

Item 2. Unregistered Sales of Equity Securities

On January 1, 2014, the Company issued 866,218 shares of the Company's restricted common stock to Dominion Capital, LLC as a dividend payment on the Series D convertible preferred stock. These shares were issued pursuant to the exemptions from the registration requirements of the Securities Act of 1933, as amended, afforded the Company under Section 4a(2) promulgated thereunder due to the fact that the issuance did not involve a public offering.

On January 14, 2014, the Company issued 3,641,002 shares of the Company's restricted common stock to PGI Drug Discovery, LLC as payment per the terms of a License Agreement entered into on January 14, 2014. These shares were issued pursuant to the exemptions from the registration requirements of the Securities Act of 1933, as amended, afforded the Company under Section 4a(2) promulgated thereunder due to the fact that the issuance did not involve a public offering.

On February 10, 2014, the Company issued 1,095,759 shares of the Company's restricted common stock to Mr. Robert L. Harris, a director of the Company related to the conversion of a convertible note and accrued interest into restricted common stock. These shares were issued pursuant to the exemptions from the registration requirements of the Securities Act of 1933, as amended, afforded the Company under Section 4a(2) promulgated thereunder due to the fact that the issuance did not involve a public offering.

Item 3. Defaults upon Senior Securities

None

Item 6. Exhibits

Exhibit Number	Description of Exhibit
10.1	Asset Purchase Agreement between Amarantus BioScience Holdings, Inc. and Memory DX, LLC dated as of April 29, 2014
10.2	Asset Purchase Agreement between Amarantus BioScience Holdings, Inc. and Provista Diagnostics, Inc. entered into as of May 1, 2014
31.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

32.2	Certification of Principal Accounting Office pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Schema Document
101.CAL	XBRL Calculation Linkbase Document
101.DEF	XBRL Definition Linkbase Document
101.LAB	XBRL Label Linkbase Document
101.PRE	XBRL Presentation Linkbase Document

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.

Amarantus Bioscience Holdings, Inc .

Date: May 20, 2014

By: /s/ Gerald E. Commissiong
Gerald E. Commissiong
Title: Chief Executive Officer and Director
(Principal Executive Officer)

By: /s/ Marc E. Faerber
Marc E. Faerber
Title: Controller and Vice President of Financial Operations
(Principal Accounting Officer)

EXHIBIT 10.1

ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement ("**Agreement**"), dated as of April 29, 2014 (the "**Effective Date**"), is entered into by and between Memory Dx, LLC, an Arizona limited liability company ("**MDx**"), and Amarantus Bioscience Holdings Inc., a Nevada corporation ("**Amarantus**").

RECITALS

A. MDx desires to transfer and assign to Amarantus certain of its assets related to LymPro Technology (as defined below), and Amarantus desires to purchase such assets on the terms and conditions of this Agreement.

Accordingly, in consideration of the representations, warranties and agreements herein contained, the parties agree as follows:

AGREEMENT

1. Transfer and Assignment of Assets. Subject to the terms and conditions of this Agreement, effective as of the Closing Date (as defined below), MDx shall transfer, assign, contribute, convey and deliver to Amarantus all of MDx's right, title and interest in and to all of the rights, properties, goodwill and assets of MDx of every nature, kind and description, tangible and intangible, wherever located, whether or not carried on the books of MDx ("Transferred Assets"), except those assets expressly identified as Excluded Assets on Schedule 1 attached hereto (the "Excluded Assets"), which shall remain with MDx. "LymPro Technology" means any and all cell-based technique for the detection, diagnosis or prognostic testing related to any neurodegenerative disorder, including without limitation, Alzheimer's Disease. The Transferred Assets specifically include, without limitation:

1.1 all of the intellectual property owned by MDx as of the Closing Date (the "Intellectual Property"), including:

(a) any and all patents and patent applications (respectively issued or filed throughout the world), owned by MDx as of the Closing Date, as well as any extensions, divisions, continuations and continuation-in-parts thereof and any applications or patents that claim priority from such patents and applications, including, without limitation, any foreign counterparts of such patents, in each case related to the LymPro Technology;

(b) the copyrights owned by MDx as of the Closing Date related to the LymPro Technology;

(c) all other intellectual property and technology, including, without limitation, know-how, trade secrets, inventions (whether or not patented), data, techniques, materials, clinical and pre-clinical protocols, case report forms, regulatory correspondence, written authorization to access regulatory correspondence for Amarantus, designs, formulas, processes, procedures, methods, source code, software, databases, works of authorship, and all documentation and information relating to the design, manufacture, testing, installation, operation, repair, maintenance, support and use of the LymPro Technology, including without limitation any and all discoveries, improvements and inventions which are owned by MDx pursuant to Section 4.5 of the Leipzig Agreement (as defined in Section 4);

(d) the right to sue and recover damages for past, present and future infringement of any intellectual property.

1.2 all computers, hard drives, removable storage media and records incorporating the Intellectual Property.

If either (i) a material "Transferred Asset" that falls within the definition of "Transferred Asset" was not transferred to Amarantus as of the Closing, or (ii) a material asset that does not fall within the definition of a "Transferred Asset" was inadvertently transferred to Amarantus, then MDx or Amarantus, as the case may be, shall promptly, without payment of consideration, transfer and assign such asset to the party who was intended to receive or retain such asset, as the case may be, which transfer or receipt, as the case may be, shall be deemed to have been effective as of the Closing Date.

2 . Liabilities. Amarantus shall not assume and shall not be deemed to have assumed or be liable or responsible for any debt, obligation, duty or liability of MDx or any affiliate of MDx, whether known or unknown, fixed or contingent, certain or uncertain (collectively, the "**Liabilities**"), and MDx shall remain responsible for all Liabilities.

3. Consideration. The assignment and transfer of the Transferred Assets to Amarantus are made in consideration of:

3.1 Fifty thousand dollars ($50,000) payable by Amarantus to MDx on the Effective Date;

3.2 Fifty thousand dollars ($50,000) payable by Amarantus to MDx sixty (60) days after the Effective Date;

3.3 Fifty thousand dollars ($50,000) payable by Amarantus to MDx one hundred twenty (120) days after the Effective Date; and

3.4 the issuance by Amarantus of one million five hundred thousand (1,500,000) shares of Amarantus Rule 144 common stock, with piggy-back registration rights, to MDx (the "**Shares**") upon delivery by MDx of the Transferred Assets.

4. Contingent Consideration. MDx entered into that certain License Agreement with the University of Leipzig as of May 22, 2003, as amended in May 2004, March 2006, and June 2013, (the "Leipzig Agreement") which license is included among the Excluded Assets. MDx granted a sublicense under the Leipzig Agreement to Amarantus in that certain Exclusive License Agreement entered into by Amarantus and MDx in December 2012 (the "Sublicense Agreement"). Amarantus may then negotiate a direct license from the University of Leipzig ("Leipzig") for any and all intellectual property rights included in the Leipzig Agreement (including the LymPro Technology). If Amarantus comes to agreement with Leipzig, acceptable to Amarantus in its sole discretion, as to terms and conditions under which the University of Leipzig would grant a direct license to Amarantus, then, upon request by Amarantus, Amarantus would terminated the Sublicense Agreement and MDx agrees to terminate the Leipzig Agreement. Notwithstanding the foregoing, MDx will not terminate the Leipzig Agreement without Amarantus' prior written consent for so long as . If Amarantus enters into a direct license with Leipzig for the intellectual property rights included in the Leipzig Agreement, and MDx terminates the Leipzig Agreement, then Amarantus would pay the following additional consideration to MDx:

4.1 Six million five hundred thousand (6,500,000) shares of Amarantus Rule 144 common stock, with piggy-back registration rights, to be issued by Amarantus within 10 business days after execution by Amarantus and Leipzig of a direct license agreement granting rights to Amarantus to the intellectual property licensed under the Leipzig Agreement (including the LymPro Technology.

5. Closing and Closing Deliverables.

5.1 The transfer, assignment, contribution, conveyance and delivery will be effected by delivery by MDx to Amarantus of the duly executed Bill of Sale and Conveyance (attached hereto as Exhibit A) and such other good and sufficient instruments of conveyance and transfer, as shall be necessary to vest in Amarantus good and marketable title to the Transferred Assets, free and clear of all claims, liens and encumbrances, except for those listed on Schedule 1 attached hereto. The closing of the transactions contemplated by this Agreement will take place (either in person or remotely by electronic exchange of documents) on April 29, 2014, or such other date as MDx and Amarantus may mutually agree upon in writing (the "**Closing**"). The date on which the Closing actually occurs is hereinafter referred to as the "**Closing Date**."

5.2 MDx will not retain any Transferred Assets, including any copies thereof, after the Closing Date.

5.3 Upon the Closing Date, the parties agree that certain Laboratory Services Agreement dated as of April 2, 2013 (the "Lab Services Agreement") will be terminated, and no further payments shall be due MDx under the Lab Services Agreement. MDx hereby releases from any and all claims and liabilities arising under the Lab Services Agreement.

6. Representations and Warranties of MDx. MDx hereby represents and warrants to Amarantus as follows:

6.1 Corporate Authority. MDx has all requisite corporate power and authority to enter into this Agreement and to consummate the transactions contemplated hereby. The execution and delivery of this Agreement by MDx and the consummation by MDx of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of MDx. This Agreement has been duly executed and delivered by MDx and constitutes a valid and binding obligation of MDx enforceable in accordance with its terms.

6.2 Ownership of Assets; Sufficiency.

6.2.1 MDx has, and is transferring to Amarantus, good and marketable title to the Transferred Assets, free and clear of any lien or other encumbrance, except for those listed on Schedule 1 attached hereto. Without limiting the generality of the foregoing, MDx is the sole creator of the Intellectual Property and owns all right, title and interest in each item thereof. No part of the Intellectual Property constitutes "work made for hire" for customers or clients. MDx has not granted to any party any license, agreement or permission to use the Intellectual Property, except as listed on Schedule 1 attached hereto. MDx has no knowledge that the Intellectual Property is being infringed by any other party. No claim is pending or, to MDx's knowledge, has been threatened to the effect that the Intellectual Property infringes on the rights of any third party or contesting the ownership, validity, license or use of the Intellectual Property. None of the Transferred Assets are co-owned by MDx and Leipzig.

6.2.2 The Transferred Assets constitute all of the assets, properties and rights, except for the Excluded Assets, that are necessary and sufficient to develop and commercialize the LymPro Technology in substantially the manner as currently conducted or contemplated to be conducted, in each case, on the date hereof by MDx.

6.3 Non-Contravention. The execution, delivery and performance by MDx of this Agreement, and the consummation of the transactions contemplated by this Agreement by MDx will not (i) contravene, conflict with or result in a violation of any of the provisions of the charter, bylaws or other organizational document of MDx; or (ii) contravene or conflict with or constitute a violation of any provision of any law, judgment, injunction, order or decree binding upon or applicable to MDx or relating to or affecting the Transferred Assets.

6.4 Intellectual Property.

6.4.1 Section 6.4.1 of the Disclosure Schedules identifies all Intellectual Property owned or controlled by MDx, including all data related to the LymPro Technology, other than pursuant to the Excluded Assets.

6.4.2 Section 6.4.2 of the Disclosure Schedules identifies all computers, hard drives, and removable media among the Transferred Assets.

6.4.3 MDx has not filed for registration any application for the registration of Intellectual Property by or on behalf of MDx, and MDx is not a party to any proceedings or actions before any Governmental or Regulatory Authority relating to any Intellectual Property.

6.4.4 MDx has provided to Amarantus true and complete copies of all Intellectual Property, including without limitation all data related to the LymPro Technology;

6.4.5 MDx exclusively owns and possesses all right, title and interest in, free and clear of all Liens (other than Permitted Liens), free and clear of all Liens, all of the Intellectual Property.

6.4.6 All current and former employees, consultants and independent contractors of MDx have entered into a valid and binding Contract with MDx sufficient to vest title in MDx of all Intellectual Property created by such employees, consultants and independent contractors in the scope of their employment or engagement with MDx, as applicable.

6.4.7 There is no claim by any third Person pending or, to MDx's knowledge, threatened against MDx, contesting the validity, enforceability, or ownership of any Transferred Assets. The validity or enforceability of the Intellectual Property owned by MDx has not been challenged in any jurisdiction. To the knowledge of MDx, the Intellectual Property owned by MDx is valid, subsisting, and in full force and effect.

6.4.8 MDx has not disclosed, furnished to or made accessible any of its Trade Secrets within the Intellectual Property to any Person who is not subject to a written agreement to maintain the confidentiality of such Trade Secrets. MDx has, and reasonably enforces, a policy requiring each employee, consultant and independent contractor to execute a proprietary information, confidentiality and assignment agreement, and all current and former employees, consultants and independent contractors of MDx that generated, or had access to, Trade Secrets of MDx in connection with the development of the LymPro Technology have executed such an agreement.

6.4.9 Except as set forth on Section 6.4.9 of the Disclosure Schedules, to MDx's knowledge, the development or commercialization of the LymPro Technology has not, does not and will not infringe, misappropriate, dilute, violate or otherwise conflict with any Intellectual Property of any other Person or constitute a violation of the Lanham Act, unfair competition or unfair trade practices under the Law of any jurisdiction. MDx has not received any written notice of any claim (including by an offer to license any Intellectual Property) and, to MDx's knowledge, there is no threatened claim, or any basis for any claim (whether or not pending or threatened), against MDx asserting that MDx infringes upon, misappropriates or otherwise conflicts with the Intellectual Property of any Person or constitute a violation of the Lanham Act, unfair competition or unfair trade practices under the Laws of any jurisdiction.

6.4.10 To MDx's knowledge, none of the Intellectual Property owned by MDx is being infringed or misappropriated by any Person. MDx has not given any notice to any Person asserting infringement or misappropriation by any such Person of any of the Intellectual Property.

6.4.11 Except as set forth on Schedule 6.4.11 of the Disclosure Schedules, MDx has not received any grant, loan, subsidy, investment or other source of funding from any Governmental or Regulatory Authority relating to development of the LymPro Technology.

6.4.12 Debarment. MDx is not, and has not, in the course of conducting the research and development of the LymPro Technology, used in any capacity any person who has been debarred under Article 306 of the FDCA, 21 U.S.C. §335a(a) or (b), or any equivalent foreign or local law, rule or regulation.

6.5 Indemnification. MDx hereby agrees to indemnify, defend and hold harmless Amarantus and its successors and assigns from and against any and all losses, claims, demands, damages, costs and expenses (including, without limitation, reasonable attorneys' fees and disbursements) of every kind, nature and description based upon, arising out of or otherwise in respect of: (a) any material inaccuracy or any material breach of any of the foregoing representations and warranties; (b) any negligent or willful breach of or failure to perform any covenant, agreement or obligation of MDx in this Agreement or in any Related Agreement; (c) the Liabilities, including the any and all liabilities accrued in the operation of MDx prior and up to the Closing; or (d) any fraud in connection with, or any willful breach of, this Agreement or any Related Agreement.

6.6 Right of Setoff. Without limiting any other remedies available to Amarantus, Amarantus would have the right to set off any amounts owed by MDx pursuant to the foregoing indemnification obligations against any amounts owed to MDx under this Agreement.

7. Representations and Warranties of Amarantus. Amarantus hereby represents and warrants to MDx as follows:

7.1 Corporate Authority. Amarantus has all requisite corporate power and authority to enter into this Agreement and to consummate the transactions contemplated hereby. The execution and delivery of this Agreement and the consummation by Amarantus of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Amarantus. This Agreement has been duly executed and delivered by Amarantus and constitutes a valid and binding obligation of Amarantus enforceable in accordance with its terms.

7.2 Non-Contravention. The execution, delivery and performance by Amarantus of this Agreement, and the consummation of the transactions contemplated by this Agreement by Amarantus will not (i) contravene, conflict with or result in a violation of any of the provisions of the charter, bylaws or other organizational document of Amarantus; or (ii) contravene or conflict with or constitute a violation of any provision of any law, judgment, injunction, order or decree binding upon or applicable to Amarantus or relating to or affecting the Transferred Assets.

8. Other Agreements.

8.1 Sales Taxes. MDx and Amarantus acknowledge that no transfer taxes are expected to arise out of the assignment and transfer of the Transferred Assets by MDx to Amarantus. To the extent such transfer taxes do arise, and to the extent permitted by applicable law, MDx and Amarantus shall use reasonable best efforts to minimize such transfer taxes, and MDx shall bear and pay any such transfer taxes.

8.2 Further Assurances. Each of the parties, for itself and its successors and assigns, hereby covenants and agrees that, without further consideration, at any time and from time to time after the date hereof, it will cooperate with the other parties to execute and deliver such other documents and instruments, amend any of the schedules hereto and to take or cause to be taken all such actions as from time to time may be reasonably requested by such party to obtain the full benefits of this Agreement, to evidence, vest, perfect and confirm, document, and carry out the assignment and transfer of the Transferred Assets, to ensure the retention by MDx of the Liabilities, and to effect the consummation of any related transactions referenced in this Agreement.

9. General Provisions.

9.1 Entire Agreement. This Agreement (including any schedules, exhibits and addenda hereto) and the other documents referred to herein, contain the entire agreement of the parties with respect to the subject matter of this Agreement and supersedes all previous communications, representations, understandings and agreements, either oral or written, between the parties with respect to the subject matter. For clarity, the license agreement between Amarantus and MDx dated [] shall remain in full force and effect. This Agreement may not be altered or amended except by a written instrument signed by the authorized legal representatives of both parties.

9.2 Governing Law. Any questions, claims, disputes or litigation concerning or arising from the Agreement shall be governed by the laws of the State of California, United States of America, without giving effect to any federal or state conflicts of laws principles or doctrines of the United States, or any nation state.

9.3 Assignment; Binding Effect. This Agreement is not assignable by any Party without the prior written consent of the other Party. Notwithstanding the foregoing, Amarantus shall be permitted, without the consent of MDx, to assign this Agreement (a) to its Affiliates or to perform this Agreement, in whole or in part, through its Affiliates, provided that Amarantus shall be primarily liable and responsible for performance by such Affiliate hereunder, or (b) to any successor or third Person that acquires all or substantially all of the assets to which this Agreement relates by sale, transfer, merger, reorganization, operation of law or otherwise; provided that the assignee agrees in writing to be bound to the terms and conditions of this Agreement. In the event of an assignment permitted under this Section 10.6, the assigning Party shall notify the other Party in writing of such assignment. This Agreement shall be binding upon and shall inure to the benefit of the Parties and their successors and permitted assigns. Any assignment not in accordance with this Section 9.3 shall be null and void.

9.4 Successors and Assigns. This Agreement shall bind and shall inure to the benefit of the parties hereto and their respective assigns, transferees, and successors.

9.5 Counterparts; Facsimile. This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which, when taken together as a whole, shall constitute one and the same instrument. Facsimile copies of signed signatures pages shall be deemed binding originals.

9.6 Notices. Any notices required or permitted hereunder shall be given in writing either (a) through personal delivery by courier with tracking capabilities or otherwise, (b) by telecopy or other electronic medium, or (c) by deposit in United States mail. All notices shall be deemed given or made (x) on the date delivered if delivered personally, by courier or otherwise, (y) on the date initially received, if delivered by telecopy or other electronic medium followed by confirmation by personal delivery or registered or certified mail, or (z) on the third business day after it is mailed.

9.7 Severability. If any provision in this Agreement shall be found or be held to be invalid or unenforceable, then the meaning of said provision shall be construed, to the extent feasible, so as to render the provision enforceable, and if no feasible interpretation would save such provision, it shall be severed from the remainder of this Agreement which shall remain in full force and effect unless the severed provision is essential and material to the rights or benefits received by any party. In such event, the parties shall use best efforts to negotiate, in good faith, a substitute, valid and enforceable provision or agreement which most nearly affects the parties' intent in entering into this Agreement.

9.8 No-Third Party Beneficiaries. This Agreement is for the sole benefit of the parties hereto and their permitted assigns and nothing herein, express or implied, is intended to or will confer upon any other person or entity any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

9.9 Time of the Essence. With regard to all dates and time periods set forth or referred to in this Agreement, time is of the essence.

9.10 Specific Performance. The Parties agree that irreparable damages would occur in the event any provision of this Agreement is not performed in accordance with the terms hereof and each of the Parties will be entitled to specific performance of the terms hereof or injunctive relief, in addition to any other remedy at law or in equity that may be available under applicable Law.

9.11 Expenses. Except as otherwise expressly provided in this Agreement, whether or not the transactions contemplated hereby are consummated, each Party hereto will pay its own costs and expenses incurred in connection with the negotiation, execution and closing of this Agreement.

9.12 Announcement. Following the Closing, MDx will not issue any press release or otherwise make any public statement with respect to this Agreement and the transactions contemplated hereby without the prior consent of Amarantus, except as may be required by applicable Law. Amarantus may issue a press release or otherwise make public statements with respect to this Agreement and the transactions contemplated hereby without MDx's consent.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, MDx and Amarantus have caused this Agreement to be signed by their respective officers thereunto duly authorized, all as of the date first written above.

"MDx"

Memory Dx, LLC
an Arizona limited liability company

By: _____
Name: _____
Title: _____

"Amarantus"

Amarantus Bioscience Holdings Inc.
a Nevada corporation

By: _____
Name: Marc E. Faerber
Title: V.P. Finance

Signature Page to Asset Purchase Agreement

SCHEDULE 1

EXCLUDED ASSETS

Licensing Agreement between GW Medical Technologies, LLC (now MDx) and the University of Leipzig, dated May 22, 2003, as amended.

EXHIBIT A

FORM OF BILL OF SALE

BILL OF SALE AND CONVEYANCE

This BILL OF SALE AND CONVEYANCE is made and entered into as of July 16, 2010, by and among Memory Dx, LLC, a [] corporation (the "**MDx**") and Amarantus Bioscience Holdings, Inc., a Delaware corporation (the "**Amarantus**").

R E C I T A L S

A. MDx and Amarantus are parties to an Asset Transfer and Assignment Agreement dated as of April [], 2014 (the "**Asset Purchase Agreement**") pursuant to which MDx agreed to sell, and Amarantus and agreed to purchase, the "Transferred Assets," as set forth in **Section** 1 of the Asset Purchase Agreement.

B. MDx and Amarantus now desire to carry out the intent and purpose of the Asset Purchase Agreement by MDx's execution and delivery to Amarantus of this instrument evidencing the sale, conveyance, assignment, transfer and delivery to Amarantus of certain of the Transferred Assets.

C. It is the intent of the parties hereto to reflect the transfer of title to the Transferred Assets owned by MDx by the execution and delivery of this Bill of Sale and Conveyance by MDx to Amarantus.

NOW, THEREFORE, in consideration of the covenants, representations, warranties and mutual agreements set forth herein and in the Asset Purchase Agreement and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, MDx and Amarantus hereby agree as follows:

1. All capitalized terms used as defined terms and not otherwise defined herein shall have the meanings set forth in the Asset Purchase Agreement.

2. MDx does hereby, effective from and after the Closing, sell, convey, assign, transfer and deliver unto Amarantus, MDx's entire right, title and interest in, to and under the Transferred Assets set forth in Exhibit A-1 hereto.

3. This instrument shall be binding upon and shall inure to the benefit of the respective successors, assigns and transferees of MDx and Amarantus.

4. In the event that any provision of this Bill of Sale and Conveyance is construed to conflict with a provision of the Asset Purchase Agreement, the provision in the Asset Purchase Agreement shall be deemed controlling.

5. This instrument shall be construed and enforced in accordance with the laws (other than the conflict of law rules) of the State of California.

6. This Bill of Sale and Conveyance may be executed in one or more counterparts, each of which shall be deemed an original but all of which together will constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Bill of Sale and Conveyance to be executed and delivered by their duly authorized officers as of the date first above written.

Memory Dx, LLC

By: _____
Name: _____
Title: _____

Amarantus Bioscience Holdings Inc.

By: _____
Name: _____
Title: _____

EXHIBIT A-1

TRANSFERRED ASSETS

[NTD: To be updated to reflect any changes to Section 1 of the APA]

1. The Transferred Assets transferred hereby shall consist of all of MDx's right, title and interest in and to all of the rights, properties, goodwill and assets of MDx of every nature, kind and description, tangible and intangible, wherever located, whether or not carried on the books of MDx, except those assets expressly identified as Excluded Assets on Schedule 1 to the Asset Purchase Agreement, which shall remain with MDx. "LymPro Technology" means any and all cell-based technique for the detection, diagnosis or prognostic testing related to any neurodegenerative disorder, including without limitation, Alzheimer's Disease. The Transferred Assets specifically include, without limitation:

1.1 all of the intellectual property owned by MDx as of the Closing Date (the "Intellectual Property"), including:

(a) any and all patents and patent applications (respectively issued or filed throughout the world), owned by MDx as of the Closing Date, as well as any extensions, divisions, continuations and continuation-in-parts thereof and any applications or patents that claim priority from such patents and applications, including, without limitation, any foreign counterparts of such patents, in each case related to the LymPro Technology;

(b) the copyrights owned by MDx as of the Closing Date related to the LymPro Technology;

(c) all other intellectual property and technology, including, without limitation, know-how, trade secrets, inventions (whether or not patented), data, techniques, materials, clinical and pre-clinical protocols, designs, formulas, processes, procedures, methods, source code, software, databases, works of authorship, and all documentation and information relating to the design, manufacture, testing, installation, operation, repair, maintenance, support and use of the LymPro Technology;

(d) the right to sue and recover damages for past, present and future infringement of any intellectual property.

1.2 all computers, hard drives, removable storage media and records incorporating the Intellectual Property

ASSET PURCHASE AGREEMENT

This **ASSET PURCHASE AGREEMENT** (this "**Agreement**") is entered into as of May 1, 2014 (the "**Effective Date**") by and between Amarantus Bioscience Holdings Inc., a Nevada corporation, with an office at 953 Indiana Street, San Francisco, CA 94107 ("**Purchaser**") and Provista Diagnostics, Inc., a Delaware corporation, with an office at 17301 N. Perimeter Drive, Suite 100, Scottsdale, AZ 85255 ("**Seller**"). Purchaser and Seller may be referred to hereinafter, individually as "**Party**" and, collectively, as the "**Parties**."

WHEREAS**,** Seller has developed and owns certain assets including a fluorescently activated cell sorter (FACS), related equipment, software and data (as defined below); and

WHEREAS, Seller wishes to sell certain tangible and intangible assets to Purchaser relating to the FACS system and Purchaser wishes to purchase such assets, all as set forth in more detail herein below.

NOW THEREFORE, in consideration of the premises, the mutual covenants and promises set forth in this Agreement, and other good and valuable consideration, the Parties agree as follows:

1. Definitions. The capitalized terms used in this Agreement and not defined elsewhere in it shall have the meanings specified for such terms in this Section 1.

1.1 "**Transferred Assets**" means the specific assets, equipment, software and technology listed on Exhibit A that are owned or controlled by Seller as of the Effective Date, including, without limitation, the Instrument and all technical information, data, and software that is embodied within the computers and the equipment which are necessary for operation of the Instrument.

1.2 "**Lien**" means any liens, encumbrances, mortgages, pledges, options, charges, security interests and any other claims of third parties on or concerning the Transferred Assets.

1.3 **"Closing"** means the closing of this Agreement at which time Seller shall make the Sale of the Transferred Assets to Purchaser, and Purchaser shall tender the Purchase Price to Seller for the Transferred Assets. The Parties have scheduled the Closing to occur within 5 business days of the Effective Date or at such other later time as the Parties shall mutually agree.

2. Purchase and Sale.

2.1 **Sale.** Upon the Closing, subject to the terms and conditions of this Agreement, Seller hereby sells, conveys, assigns and transfers to Purchaser, and Purchaser hereby purchases, acquires and accepts from Seller all of Seller's right, title and interest in and to the Transferred Assets "as is" free and clear of Liens (the **"Sale"**).

3. **Delivery.** Upon the Closing, Seller will make the Transferred Assets available for pick up and transport at Seller's office located at 17301 N. Perimeter Drive, Suite 100, Scottsdale, AZ 85255 at Purchaser's sole cost and expense. Purchaser shall be responsible for set up, calibration, testing and all other actions required to ready the Transferred Assets for operation and use at Purchaser's business location.

4. **Purchase Price.** At the Closing, Purchaser will pay to Seller **Twenty Thousand Dollars ($20,000.00)** for the Transferred Assets (the **"Purchase Price"**).

5. **Indemnification**.

5.1 **By Seller**. Subject to Section 5.2 below, Seller will defend, indemnify and hold harmless Purchaser, from and against any and all damages, settlements, losses or expenses (including, without limitation, counsel fees, collectively, "Losses") arising from (i) Seller's material breach of any its representations, warranties or covenants made by it pursuant to this Agreement, (ii) the negligence, recklessness or willful conduct of Seller; except to the extent the claim arises as a result of the negligence, recklessness or willful conduct of Purchaser or to the extent Purchaser's failure to give Seller prompt notice of such claim materially prejudices Seller's ability to defend such claim for which Purchaser is seeking indemnification pursuant to this Section 5.

5.2 **Indemnification Procedure**. As a condition to Purchaser's right to receive indemnification under Section 5.1, Purchaser shall (i) promptly notify Seller as soon as it becomes aware of a claim or action for which indemnification may be sought pursuant hereto, (ii) cooperate with Seller in the defense of such claim or suit, and (iii) permit Seller to control the defense of such claim or suit, including without limitation the right to select defense counsel. In no event, however, may Seller compromise or settle any claim or suit in a manner which admits fault or negligence on the part of Purchaser without the prior written consent of Purchaser.

6. **Mutual Representations and Warranties.** Each of Purchaser and Seller hereby makes to the other the representations and warranties contained in this Section 6.

6.1 It is a corporation duly organized, validly existing and is in good standing under the laws of the state of its incorporation and has all requisite power and authority, corporate or otherwise, to conduct its business as now being conducted, to own, lease and operate its properties and to execute, deliver and perform this Agreement.

6.2 The execution, delivery and performance by it of this Agreement have been duly authorized by all necessary corporate action and do not and will not (i) require any consent or approval of any third parties, (ii) violate any provision of any law, rule, regulations, order, writ, judgment, injunctions, decree, determination or award presently in effect having applicability to it or any provision of its certificate of incorporation or by-laws or (iii) result in a breach of or constitute a default under any material agreement, mortgage, lease, license, permit or other instrument or obligation to which it is a party or by which it or its properties may be bound or affected.

6.3 This Agreement is a legal, valid and binding obligation of it enforceable against it in accordance with its terms and conditions.

6.4 It is not under any obligation to any person, or entity, contractual or otherwise, that is conflicting or inconsistent in any respect with the terms of this Agreement or that would impede the diligent and complete fulfillment of its obligations.

7. Representations and Warranties of Seller. Seller hereby makes the representations and warranties set forth in this Section 7.

7.1 The Transferred Assets comprises all material assets of Seller that have been used by Seller that are necessary for operation of the Instrument as used by the Seller.

7.2 As of the Effective Date: (i) Seller has exclusive ownership of the Transferred Assets; (ii) all rights in the Transferred Assets are freely transferable; (iii) there are no claims or demands of any other person pertaining to the Transferred Assets and no proceedings have been instituted, or are pending or threatened, which challenge the rights of Seller in respect thereof; and (iv) none of the Transferred Assets has been, or will be, charged, mortgaged or otherwise encumbered by Seller.

7.3 Seller has no licenses, authorizations (whether express or implied) or other agreements under which Seller has granted rights to a third party in the Transferred Assets.

7.4 Seller has required all of its employees who have had access to Transferred Assets to execute agreements under which such employees are required to maintain the confidentiality of any Transferred Assets during or after their employment, to the extent allowable by applicable law and to assign all rights to any Transferred Assets developed during their employment to Seller.

7.5 To Seller's knowledge, there is no pending or threatened litigation against the Seller regarding the Transferred Assets or this Agreement.

8. Disclaimer. The Sale of the Transferred Assets is made on an "as is" basis. Seller expressly disclaims all warranties of any kind, whether express or implied, including but not limited to the warranties of merchantability, fitness for a particular purpose and noninfringement. The Parties agree that Seller shall not be liable for any direct, indirect, incidental, special, consequential or exemplary damages related to the Sale.

9. Other Agreements. This Agreement is the sole agreement with respect to the subject matter hereof and supersedes all other agreements and understanding between the Parties with respect to the same.

10. Notices. All notices shall be in writing and hand delivered, mailed via certified mail with return receipt requested, courier, or facsimile transmission (receipt confirmed) addressed as follows, or to such other address as may be designated from time to time:

If to Purchaser:

Amarantus Bioscience Holdings Inc.
953 Indiana Street, San Francisco, CA 94107
Attn: Gerald Commissiong, Chief Executive Officer
Tel: (408) 701-5044 ext. 105
Fax: (408) 701-5099
Email:Gerald.commissiong@amarantus.com

If to Seller:

Provista Diagnostics, Inc.
17301 N. Perimeter Drive, Suite 100
Scottsdale, AZ 85255
Attn: John Fermanis, Chief Financial Officer
Tel: 602-224-5500
Fax: 602-865-7574
Email: FermanisJ@ProvistaDx.com

Notices shall be deemed given as of the date received at the above specified address.

11. **Confidentiality.** From and after the Effective Date, Seller shall maintain all information in the possession of Seller that relates to the Transferred Assets and that is not in the public domain (**"Information"**) in confidence and will use commercially reasonable efforts to ensure that its employees and officers will not, disclose the Information to any third party nor use Information for any purpose. Seller's obligation of nondisclosure and the limitations upon the right to use the Information shall not apply (i) after a period of five (5) years from Effective Date or (ii) to the extent that Seller can demonstrate that the Information: (a) is or becomes public knowledge through no fault or omission of Seller; or (b) is obtained by Seller from a third party under no obligation of confidentiality to Purchaser.

12. **Publicity**. No press releases, reports, or other statements in connection with this Agreement intended for use in the public or private media shall be made by Purchaser or Seller without the prior written consent of the other Party. If either Party is required by law or governmental regulation to describe its relationship to the other, it shall promptly give the other Party notice with a copy of any disclosure it proposes to make. In addition, Purchaser shall not use Seller's name in connection with any products, promotion, or advertising without Seller's prior written permission. Seller shall not use Purchaser's name in connection with any products, promotion, or advertising without Purchaser's prior written permission.

13. **Dispute Resolution**.

13.1 In the event of any dispute, controversy or claim arising under, out of or in connection with this Agreement, including any subsequent amendments, or the validity, enforceability, construction, performance or breach hereof, the Parties shall refer such dispute to the senior executives of Purchaser and Seller for attempted resolution by good faith negotiations within thirty (30) days after such referral is made.

13.2 In the event the executives are unable to resolve a dispute as provided above, the Parties shall submit their dispute to binding arbitration by Judicial Arbitration and Mediation Services, Inc. (JAMS) under its rules of arbitration, by one (1) arbitrator appointed in accordance with said rules. The decision and/or award rendered by the arbitrator shall be written, final and non-appealable, and judgment on such decision and/or award may be entered in any court of competent jurisdiction. The arbitral proceedings and all pleadings and evidence shall be in the English language. Any evidence originally in a language other than English shall be submitted with an English translation accompanied by an original or true copy thereof. The place of arbitration shall be in Santa Clara County, California, U.S.A. The costs of any arbitration, including administrative fees and fees of the arbitrator(s), shall be shared equally by the Parties to the dispute, unless otherwise determined by the arbitrator(s). The losing Party shall bear the cost of attorneys' and expert fees for both Parties. The Parties agree that, any provision of applicable law notwithstanding, they will not request, and the arbitrator shall have no authority to award, punitive or exemplary damages against any Party.

14. Miscellaneous.

14.1 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without reference to its conflicts of law principles.

14.2 Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective legal representatives, successors and permitted assigns.

14.3 Headings. Section headings are inserted for convenience of reference only and do not form a part of this Agreement.

14.4 Authority. The persons signing on behalf of Seller and Purchaser warrant and represent that they have authority to execute this Agreement on behalf of the Party for whom they have signed.

14.5 No Third Party Beneficiaries. No third party, including without limitation, any employee of any Party to this Agreement, shall have or acquire any rights by reason of this Agreement. Nothing contained in this Agreement shall be deemed to constitute the Parties partners with each other or any third party.

14.6 Expenses. Each Party shall bear its own expenses and costs associated with the transaction contemplated under this Agreement.

14.7 Counterparts. This Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same document.

14.8 Amendment; Waiver. This Agreement may be amended, modified, superseded or canceled, and any of the terms may be waived, only by a written instrument executed by each Party or, in the case of waiver, by the Party or Parties waiving compliance. The delay or failure of any Party at any time or times to require performance of any provisions shall in no manner affect the rights at a later time to enforce the same. Except as expressly provided herein to the contrary, no waiver by any Party of any condition or of the breach of any term contained in this Agreement, whether by conduct, or otherwise, in any one or more instances, shall be deemed to be, or considered as, a further or continuing waiver of any such condition or of the breach of such term or any other term of this Agreement.

14.9 **Assignment and Successors.** This Agreement may not be assigned by either Party without the consent of the other Party, except that each Party may assign this Agreement and the rights and interests of such Party, in whole or in part, to any of its affiliates, any purchaser of all or substantially all of its assets or to any successor corporation resulting from any merger or consolidation of such Party with or into such corporations.

IN WITNESS WHEREOF, the Parties have caused this Asset Purchase Agreement to be executed by their duly authorized representatives.

Provista Diagnostics, Inc.		**Amarantus Bioscience Holdings Inc.**	
By:	_____	By:	_____
Name:	_____	Name:	_____
Title:	_____	Title:	_____
Date:	_____	Date:	_____

Exhibit A

- Flow Cytometer Instrument (serial number for the flow cytometer is E97500506) (the **"Instrument"**)
- Autosampler for the Instrument
- Powermac computer (PowerMac G5; PowerMac 7,3; Serial # CK5410DKRU3)
- Apple Monitor
- Apple Mouse
- Apple Keyboard
- Wireless adapter for powermac (to connect to WiFi)
- OneRac Electrical Current Amplifier
- Rack controller Unit
- Belkin Key (a networking device needed to bridge communication between the Instrument and computer)
- All associated software
- All associated cables
- The spare parts in the box labeled "FACS Spare Parts"
- Instruction Manuals for the Instrument

EXHIBIT 31.1

CERTIFICATIONS

I, Gerald E. Commissiong, certify that:

1) I have reviewed this quarterly report on Form 10-G of Amarantus Bioscience Holdings, 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 we 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: May 20, 2014

/s/ GERALD E. COMMISSIONG
Gerald E. Commissiong
Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATIONS

I, Marc Faerber, certify that:

1) I have reviewed this annual report on Form 10-K of Amarantus Bioscience Holdings, 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 we 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: May 20, 2014

/s/ MARC FAERBER

Marc Faerber
Controller and Vice President of Financial Operations
(Principal Accounting Officer)

EXHIBIT 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
AMARANTUS BIOSCIENCE HOLDINGS, INC.
FORM 10-Q FOR THE QUARTER ENDED SEPTEMBER 30, 2013
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED
PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I am the Chief Executive Officer of Amarantus Bioscience Holdings, Inc., a Nevada corporation (the "Company"). I am delivering this certificate in connection with the quarterly report on Form 10-Q of the Company for the quarter ended March 31, 2014 and filed with the Securities and Exchange Commission ("Form 10-Q").

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I hereby certify that, to the best of my knowledge, the Form 10-Q fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 20, 2014

/s/ GERALD E. COMMISSIONG
Gerald E. Commissiong
Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 32.2

CERTIFICATION OF SENIOR VICE PRESIDENT, FINANCE
AMARANTUS BIOSCIENCE HOLDINGS, INC.
FORM 10-Q FOR THE QUARTER ENDED SEPTEMBER 30, 2013
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED
PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I am the Chief Financial Officer of Amarantus Bioscience Holdings, Inc., a Nevada corporation (the "Company"). I am delivering this certificate in connection with the quarterly report on Form 10-Q of the Company for the quarter ended March 31, 2014 and filed with the Securities and Exchange Commission ("Form 10-Q").

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I hereby certify that, to the best of my knowledge, the Form 10-Q fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 20, 2014

/s/ MARC E. FAERBER
Marc E. Faerber
Controller and Vice President of Financial Operations
(Principal Accounting Officer)