

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 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 June 30, 2013

Transition Report pursuant to 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from to \_\_\_\_\_

Commission File Number: 333-148922

**Amarantus BioScience Holdings, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of incorporation or organization)

**26-0690857**

(IRS Employer Identification No.)

**675 Almanor Ave., Sunnyvale, CA**

(Address of principal executive offices)

**94085**

(Zip Code)

Registrant's telephone number, including area code: **(408) 737-2734**

\_\_\_\_\_  
(Former name, former address and former fiscal year, if changed since last report)

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company.

Large accelerated filer  Accelerated filer

Non-accelerated filer

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

State the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: 460,973,956 common shares as of August 12, 2013.

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## PART I - FINANCIAL INFORMATION

### Item 1. Financial Statements

Our financial statements included in this Form 10-Q are as follows:

- F-1 [Consolidated Balance Sheets \(Unaudited\) as of June 30, 2013 and December 31, 2012;](#)
- F-2 [Consolidated Statements of Operations \(Unaudited\) for the three and six months ended June 30, 2013 and June 30, 2012 and for the period from January 14, 2008 \(Date of Inception\) to June 30, 2013;](#)
- F-3 [Consolidated Statements of Cash Flows \(Unaudited\) for the six months ended June 30, 2013 and June 30, 2012 and for the period from January 14, 2008 \(Date of Inception\) to June 30, 2013;](#)
- F-4 [Notes to Consolidated Financial Statements](#)

These financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and the SEC instructions to Form 10-Q. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. Operating results for the interim period ended June 30, 2013 are not necessarily indicative of the results that can be expected for the full year.

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**  
**(A Development Stage Company)**  
**CONSOLIDATED BALANCE SHEETS (UNAUDITED)**  
**AS OF JUNE 30, 2013 AND DECEMBER 31, 2012**

	<u>June 30, 2013</u>	<u>December 31, 2012</u>
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 67,071	\$ 157,174
Prepaid expenses and other current assets	413,967	519,620
Total current assets	481,038	676,794
<b>PROPERTY AND EQUIPMENT - Net</b>		
	—	—
<b>OTHER ASSETS</b>		
	646,143	533,143
<b>TOTAL ASSETS</b>		
	\$ 1,127,181	\$ 1,209,937
<b>LIABILITIES AND STOCKHOLDERS' DEFICIT</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 2,617,006	\$ 2,596,848
Accrued liabilities	228,862	150,049
Related Party liabilities	245,728	222,083
Note Payable	1,560,715	740,000
Current portion of warrant liability	—	232,988
Current portion of derivative liability	250,011	26,893
Current portion of convertible promissory notes, net of debt discount	674,161	768,892
Total current liabilities	5,576,483	4,737,753
<b>STOCK WARRANT LIABILITY</b>		
	—	—
<b>DERIVATIVE LIABILITY – Net of current portion</b>		
	—	—
<b>CONVERTIBLE PROMISSORY NOTES - Net of current portion</b>		
	—	—
Total liabilities	5,576,483	4,737,753
<b>COMMITMENTS AND CONTINGENCIES (Note 7)</b>		
<b>STOCKHOLDERS' DEFICIT:</b>		
Convertible preferred stock, \$0.001 par value - authorized, 10,000,000 shares, 250,000 shares designated as Series A, par value \$0.001, -0- and 250,000 shares issued and outstanding as of June 30, 2013 and December 31, 2012, respectively	—	250
Convertible preferred stock, \$0.001 par value - authorized, 10,000,000 shares, 2,500,000 shares designated as Series B, par value \$0.001, -0- shares issued and outstanding as of June 30, 2013 and December 31, 2012	—	—
Convertible preferred stock, \$0.001 par value - authorized, 10,000,000 shares, 750,000 shares designated as Series C, par value \$0.001, 375,000 and -0- shares issued and outstanding as of June 30, 2013 and December 31, 2012, respectively	375	—
Common stock, \$0.001 par value - authorized 1,000,000,000 shares; 441,627,659 and 342,516,931 shares issued and outstanding as of June 30, 2013 and December 31, 2012, respectively	441,628	342,517
Additional paid-in capital	10,728,916	7,991,465
Deficit accumulated during the development stage	(15,620,221)	(11,862,048)
Total stockholders' deficit	(4,449,302)	(3,527,816)
<b>TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT</b>		
	\$ 1,127,181	\$ 1,209,937

See notes to financial statements

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**  
**(A Development Stage Company)**  
**CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)**  
**FOR THE THREE AND SIX MONTH PERIODS ENDED JUNE 30, 2013 AND 2012, AND**  
**FOR THE PERIOD FROM JANUARY 14, 2008 (DATE OF INCEPTION) TO JUNE 30, 2013**

	Three Months Ended June 30, 2013	Three Months Ended June 30, 2012	Six Months Ended June 30, 2013	Six Months Ended June 30, 2012	Period from January 14, 2008 (Date of Inception) to June 30, 2013
NET REVENUES	\$ —	\$ —	\$ —	\$ —	\$ 415,996
<b>OPERATING EXPENSES:</b>					
Research and development	474,671	359,829	1,138,596	435,745	3,157,710
General and administrative	829,804	574,853	2,050,476	1,864,702	10,171,937
Total costs and expenses	1,304,475	934,682	3,189,072	2,300,447	13,329,647
LOSS FROM OPERATIONS	(1,304,475)	(934,682)	(3,189,072)	(2,300,447)	(12,913,651)
<b>INTEREST &amp; OTHER INCOME (EXPENSE)</b>					
Interest Expense	(268,353)	(111,932)	(1,141,471)	(217,382)	(3,871,067)
Other Income (Expense)	—	—	—	—	75,823
Change in fair value of warrant & derivative liabilities	671,943	51,287	572,370	205,171	1,454,544
Total interest & other income (expense)	403,590	(60,645)	(569,101)	(12,211)	(2,340,700)
NET LOSS	\$ (900,885)	\$ (995,327)	\$ (3,758,173)	\$ (2,312,658)	\$ (15,254,351)
NET LOSS PER SHARE, BASIC	\$ (0.00)	\$ (0.01)	\$ (0.01)	\$ (0.02)	
COMMON SHARES OUTSTANDING - BASIC	397,175,440	101,415,191	380,084,393	94,635,577	

See notes to financial statements

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**  
**(A Development Stage Company)**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)**  
**FOR THE SIX MONTHS ENDED JUNE 30, 2013 AND 2012, AND**  
**FOR THE PERIOD FROM JANUARY 14, 2008 (DATE OF INCEPTION) TO JUNE 30, 2013**

	Six Months Ended June 30, 2013	Six Months Ended June 30, 2012	Period from January 14, 2008 (Date of Inception) to June 30, 2013
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net loss for the period	\$ (3,758,173)	\$ (2,312,658)	\$ (15,254,351)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	—	5,808	33,014
Amortization of financing costs	133,114	—	788,995
Amortization of debt discount	596,270	—	609,361
Gain on disposal of equipment	—	—	(2,621)
Loss on stock issuance	—	—	672,414
Stock issued for services	65,551	—	1,703,247
Stock-based compensation	597,582	1,400,760	1,662,613
Non-cash interest expense related to warrants and derivatives	—	—	763,316
Non-cash interest expense related to convertible notes	—	158,206	—
Change in fair value of warrant and derivative liabilities	(572,370)	(205,171)	(1,449,776)
Gain on settlement of convertible note and warrants	—	—	(137,632)
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(27,461)	(84,721)	(528,984)
Accounts payable	954,126	720,128	4,344,784
Accrued liabilities	341,313	50,578	536,340
Related party liabilities	23,645	—	(120,142)
Net cash used in operating activities	<u>(1,646,403)</u>	<u>(267,070)</u>	<u>(6,379,422)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Purchases of property and equipment	—	—	(40,392)
Acquisition of other assets	(34,000)	—	(89,000)
Security deposit write-off	—	—	(1,000)
Net cash used in investing activities	<u>(34,000)</u>	<u>—</u>	<u>(130,392)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Proceeds from borrowings	1,733,300	272,848	4,404,278
Repayment of borrowings	—	—	(147,000)
Proceeds from issuance of common stock	—	—	1,797,941
Proceeds from the issuance of stock options	—	—	200,818
Proceeds from issuance of convertible preferred stock	—	—	540,000
Payments on notes payable and accrued interest	(140,000)	—	(140,000)
Payments on convertible notes and accrued interest	(3,000)	—	(3,000)
Costs of financings	—	—	(76,187)
Proceeds from sale of warrant	—	—	35
Net cash provided by financing activities	<u>1,590,300</u>	<u>272,848</u>	<u>6,576,885</u>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>			
	(90,103)	5,778	67,071
CASH AND CASH EQUIVALENTS - Beginning of period	<u>157,174</u>	<u>870</u>	<u>—</u>
CASH AND CASH EQUIVALENTS - End of period	<u>\$ 67,071</u>	<u>\$ 6,648</u>	<u>\$ 67,071</u>
<b>NONCASH INVESTING AND FINANCING ACTIVITIES:</b>			
Issuance of warrants to investors	\$ —	\$ —	\$ 371,180
Preferred stock issued in lieu of payment of payable	\$ —	\$ —	\$ 250,000
Issuance of convertible notes in lieu of payment interest	\$ —	\$ —	\$ 702
Stock issued for prepaid expenses	\$ —	\$ —	\$ 31,188
Payables forgiven for property and equipment	\$ —	\$ —	\$ 10,000

Stock issued to acquire other assets	\$ 79,000	\$ —	\$ 556,143
Stock issued to satisfy accounts payable and accrued expenses	\$ 770,254	\$ —	\$ 1,331,062
Stock issued for notes payable	\$ 600,000	\$ —	\$ 600,000
Stock issued for convertible debt	\$ 563,000	\$ —	\$ 1,527,982
Stock issued for warrant obligations	\$ 78,000	\$ —	\$ 78,000
Debt discount for derivative conversion feature	\$ 645,800	\$ —	\$ 645,800
Intrinsic value of beneficial conversion feature	\$ —	\$ —	\$ 224,985
Reclassification of warrants to additional paid-in capital	\$ —	\$ —	\$ 2,032
Bifurcation of derivatives embedded in convertible notes	\$ —	\$ —	\$ 548,053
Preferred stock warrants reclassified from liabilities to equity	\$ —	\$ 2,032	\$ 39,142
Notes payable issued for accounts payable	\$ 160,715	\$ —	\$ 160,715
Convertible notes issued for payables and accrued liabilities	\$ 187,500	\$ 284,343	\$ 647,199

See notes to financial statements

**AMARANTUS BIOSCIENCE HOLDINGS, INC.  
NOTES TO FINANCIAL STATEMENTS**

**1. GENERAL**

Amarantus Bioscience Holdings, Inc. (“Amarantus” and the “Company”) was incorporated on January 14, 2008 in the state of Delaware and was reincorporated in Nevada on March 22, 2013. The Company is a development stage biopharmaceutical drug development holding company dedicated to sourcing high-potential therapeutic and diagnostic platform technologies and aligning their development with complementary biopharmaceutical assets to reduce overall enterprise risk. Through June 30, 2013, the Company has been primarily engaged in biotechnology research and development and raising capital to fund its operations.

**2. DEVELOPMENT STAGE 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. Accordingly, the Company is considered to be in the development stage as of June 30, 2013, as defined by the Financial Accounting Standards Board, or FASB, Accounting Standard Codification, or ASC 915. 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 diagnostic and therapeutic markets; secure financing, develop a customer base; attract, retain and motivate qualified personnel; and develop strategic alliances. From inception to June 30, 2013, the Company has been funded by equity and debt financings. Although management believes that the Company will be able to successfully fund its operations, there can be no assurance that the Company will be able to do so or that the Company will ever operate profitably.

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, securing non-dilutive funding and, in the longer term, by generating 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 June 30, 2013, the Company had cash and cash equivalents of \$67,071. During the three and six months ended June 30, 2013, the Company incurred a net loss of \$900,885 and \$3,758,173 respectively and had negative cash flows from operating activities for the six months ended June 30, 2013 of \$1,646,403. In addition, the Company had an accumulated deficit of \$15,620,221 at June 30, 2013. The Company believes that 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 or equity financings. Management plans to seek additional debt and/or equity financing for the Company through private or public offerings, obtaining non-dilutive funding, 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 this uncertainty.



### 3. SIGNIFICANT ACCOUNTING POLICIES

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

**Certain Significant Risks and Uncertainties** - The Company participates in a global dynamic highly competitive industry and believes that changes in any of the following areas could have a material adverse effect on the Company's future financial position, results of operations, or cash flows: ability to obtain future financing; advances and trends in new technologies and industry standards; regulatory approval and market acceptance of the Company's products; development of the necessary manufacturing capabilities and to obtain adequate resources of necessary materials; development of sales channels; certain strategic relationships; litigation or claims against the Company based on intellectual property, patent, product, regulatory, or other factors; and the Company's ability to attract and retain employees necessary to support its growth.

**Concentration of Credit Risk** - Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents. The Company places its cash and cash equivalents with domestic financial institutions that are federally insured within statutory limits.

**Cash and Cash Equivalents** - The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

**Property and Equipment** - Property and equipment are stated at cost and are depreciated on a straight-line basis over their estimated useful lives as follows:

Equipment	3 years
Computer equipment	2 years
Furniture and fixtures	3 years

The Company reviews the carrying value of long-lived assets, including property and equipment, for impairment whenever events or changes in circumstances indicate that the carrying value may not be fully recoverable. There have been no such impairments.

Property and equipment at June 30, 2013 and December 31, 2012, consisted of the following:

	June 30, 2013	December 31, 2012
Equipment	\$ —	\$ —
Computer equipment	—	—
Furniture and fixtures	—	—
	—	—
Less accumulated depreciation	—	—
Property and equipment – net	\$ —	\$ —

  

	June 30, 2013	June 30, 2012
Depreciation Expense:		
Three months ended	\$ —	\$ 2,904
Six months ended	—	5,809
Inception to Date	33,014	31,562

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**Revenue Recognition** - The Company recognizes revenue when the earnings process is complete, which under SEC Staff Accounting Bulletin No. 104, Topic No. 13, "Revenue Recognition" ("SAB 104"), is when revenue is realized or realizable and earned, there is persuasive evidence a revenue arrangement exists, delivery of goods or services has occurred, the sales price is fixed or determinable, and collectability is reasonably assured.

The Company accounts for milestones related to research and development activities in accordance with the milestone method of revenue recognition of Accounting Standards Codification Topic 605-28, under which consideration contingent on the achievement of a substantive milestone is recognized in its entirety in the period when the milestone is achieved. A milestone is considered to be substantive when it meets all of the following criteria: the milestone is commensurate with either the performance required to achieve the milestone or the enhancement of the value of the delivered items resulting from the performance required to achieve the milestone; the milestone relates solely to past performance; and, the milestone is reasonable relative to all of the deliverables and payment terms within the agreement.

To date, the Company has only received research grant revenue and contract revenue. Research grant revenue and contract revenue is recognized as the Company provides the services stipulated in the underlying agreement based on the time and expenditures incurred, and all milestones required in the agreement have been met. Amounts received in advance of services provided are recorded as deferred revenue and recognized as revenue when the services are provided and/or the milestones are met. The Company did not receive any research grant revenue during the three and six months ended June 30, 2013 and 2012, respectively. Refer to Note 5 of the condensed consolidated financial statements, in the most recent filed 10-K, for further information on the research grant revenue received and recognized to date.

**Research and Development Expenditures** - Research and development expenses consist of personnel costs, including salaries, benefits and stock-based compensation, materials and supplies, licenses and fees, and overhead allocations consisting of various administrative and facilities related costs. Research and development activities are also separated into three main categories: research, clinical development, and biotechnology development. Research costs typically consist of preclinical and toxicology costs. Clinical development costs include costs for Phase 1 and 2 clinical studies. Biotechnology development costs consist of expenses incurred in connection with product formulation and analysis. The Company charges research and development costs, including clinical study costs, to expense when incurred, consistent with the guidance of FASB ASC 730, Research and Development.

**Stock-Based Compensation** - Stock-based compensation is measured at the grant date based on the fair value of the award. The fair value of the award that is ultimately expected to vest is recognized as expense on a straight-line basis over the requisite service period, which is generally the vesting period. The expense recognized for the portion of the award that is expected to vest has been reduced by an estimated forfeiture rate. The forfeiture rate is determined at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

*Expected Term* — The expected term of options represents the period that the Company's stock-based awards are expected to be outstanding based on the simplified method provided in Staff Accounting Bulletin No. 110, *Certain Assumptions Used in Valuation Methods*.

*Expected Volatility* — As the Company has limited stock price history, expected volatility has been estimated based on the volatilities of similar companies that are publicly traded.

*Risk-Free Interest Rate* — The Company bases the risk-free interest rate on the implied yield available on U.S. Treasury zero-coupon issues with an equivalent remaining term.

*Expected Dividend* — The Company has never declared or paid any cash dividends and does not plan to pay cash dividends in the foreseeable future, and, therefore, used an expected dividend yield of zero in the valuation model.

The Company recognizes fair value of stock options granted to nonemployees as stock-based compensation expense over the period in which the related services are received.

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**Stock Warrants** - Certain warrants to purchase the Company's stock are classified as liabilities in the condensed consolidated balance sheets. These warrants are subject to remeasurement at each balance sheet date, and any change in fair value is recognized as a component of other income (expense). Other warrants to purchase the Company's convertible preferred stock are classified as equity in the balance sheet and are not subject to remeasurement.

**Derivative Liability** - Certain derivatives embedded within convertible promissory notes have been bifurcated and recorded as derivatives in the condensed consolidated balance sheets because they are not clearly and closely related. These derivatives are subject to remeasurement at each balance sheet date, and any change in fair value is recognized as a component of other income (expense).

**Income Taxes** - The Company accounts for income taxes using the liability method whereby deferred tax asset and liability account balances are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company provides a valuation allowance, if necessary, to reduce deferred tax assets to their estimated realizable value.

In evaluating the ability to recover its deferred income tax assets, the Company considers all available positive and negative evidence, including its operating results, ongoing tax planning, and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. In the event the Company determines that it would be able to realize its deferred income tax assets in the future in excess of their net recorded amount, it would make an adjustment to the valuation allowance that would reduce the provision for income taxes. Conversely, in the event that all or part of the net deferred tax assets are determined not to be realizable in the future, an adjustment to the valuation allowance would be charged to earnings in the period such determination is made.

The Company recognizes the tax benefit from uncertain tax positions in accordance with GAAP, which prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of uncertain tax positions taken or expected to be taken in a company's tax return.

**Fair Value of Financial Instruments** -The carrying amount reported in the condensed consolidated balance sheets for cash and cash equivalents, accounts payable, and accrued liabilities approximates fair value due to the short-term maturities of such instruments.

**Net income (loss) per share attributable to Amaranthus common stockholders**

Basic net income (loss) per share attributable to Amaranthus common stockholders is calculated by dividing net income (loss) attributable to common stockholders by the weighted average number of shares outstanding for the period. In accordance with FASB ASC 260, because there was a net loss for the reported periods, zero incremental potential dilutive shares were included for diluted earnings per share because the effect would be anti-dilutive ..

**Recently Adopted Accounting Guidance**

*Fair Value Measurements.* In January 2010, the FASB issued new accounting guidance requiring additional disclosures about the different classes of assets and liabilities measured at fair value, valuation techniques and inputs used, the activity in Level 3 fair value measurements, and the transfers between Levels 1 and 2. It also clarified guidance around disaggregation and disclosures of inputs and valuation techniques for Level 2 and Level 3 fair value measurements. The current guidance is effective beginning with the first quarter of our fiscal 2010, except for the new disclosures relating to the Level 3 reconciliation, which was effective for the first quarter of our fiscal 2011. Refer to Note 6 – Fair Value Measurements for our Company's fair value measurements and disclosures.

**Recently Issued Accounting Pronouncements**

Effective January 1, 2012, the Company adopted ASU No. 2011-04, “*Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and International Financial Reporting Standards (“IFRS”)*,” issued in May 2011. This pronouncement was issued to provide a consistent definition of fair value and ensure that the fair value measurement and disclosure requirements are similar between U.S. GAAP and IFRS. ASU 2011-04 changes certain fair value measurement principles and enhances the disclosure requirements particularly for Level 3 fair value measurements. This pronouncement is effective for reporting periods beginning on or after December 15, 2011. The new guidance will require prospective application. The adoption of this accounting standard update required expanded disclosure only and did not have an impact on the Company’s consolidated financial position, results of operations or cash flows.

In December 2011, FASB issued ASU No. 2011-11, “*Balance Sheet (Topic 210)*.” This update provides enhanced disclosure requirements regarding the nature of an entity’s right of offset related to arrangements associated with its financial instruments and derivative instruments. The new guidance requires the disclosure of the gross amounts subject to rights of set-off, the amounts offset in accordance with the accounting standards followed, and the related net exposure. This pronouncement is effective for financial reporting periods beginning on or after January 1, 2013, and full retrospective application is required. The Company does not expect that the adoption of this ASU will have a material impact on its consolidated financial statements.

**4. FAIR VALUE MEASUREMENTS**

Assets and liabilities recorded at fair value in the financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels, which are directly related to the amount of subjectivity, associated with the inputs to the valuation of these assets or liabilities are as follows:

*Level 1* — Inputs that are unadjusted and based on quoted prices in active markets for identical assets or liabilities at the measurement date.

*Level 2* — Inputs (other than quoted prices included in Level 1) that are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument’s anticipated life.

*Level 3* — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management’s best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

The Company’s financial assets and liabilities that are measured at fair value on a recurring basis as of June 30, 2013 and December 31, 2012, by level within the fair value hierarchy, are as follows:

**Fair Value Measurements at June 30, 2013**

	Level 1	Level 2	Level 3	Total
Warrant Liability			\$ —	\$ —
Derivative Liability	—	\$ —	250,011	250,011
Total	\$ —	\$ —	\$ 250,011	\$ 250,011

**Fair Value Measurements at December 31, 2012**

	Level 1	Level 2	Level 3	Total
Warrant Liability		\$ 232,988		\$ 232,988
Derivative Liability	—	\$ —	26,893	26,893
Total	\$ —	\$ —	\$ 259,881	\$ 259,881

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The following table provides a summary of changes in the fair value of the Company's Level 3 financial liability mentioned above for the year ended December 31, 2012, for the six months ended June 30, 2013 and for the period from January 14, 2008 (date of inception) to June 30, 2013:

	<b>Warrant Liability</b>	<b>Derivative Liability</b>	<b>Total</b>
January 14, 2008 (date of inception) \$	—	\$ —	\$ —
Issuance of warrants	52,665		52,665
Issuance of convertible notes		9,377	9,377
Changes in fair value	(15,960)	(4,402)	(20,362)
December 31, 2008	36,705	4,975	41,680
Changes in fair value	(1,692)	(4,975)	(6,667)
December 31, 2009	35,013	—	35,013
Issuance of warrants	3,680		3,680
Issuance of convertibles notes	—	281,466	281,466
Reclassification of warrants to equity	(37,110)	—	(37,110)
Cancellation of warrants	(65,082)	—	(65,082)
Changes in fair value	67,915	6,081	73,996
December 31, 2010	\$ 4,416	\$ 287,547	\$ 291,963
Issuance of warrants	314,835	—	314,835
Issuance of convertible notes	—	257,210	257,210
Changes in fair value	(35,320)	(404,051)	(439,371)
December 31, 2011	\$ 283,931	\$ 140,706	\$ 424,637
Conversion of warrants to common stock	(2,031)	—	(2,031)
Issuance of convertible notes		4,044,349	4,044,349
Changes in fair value	(48,912)	(4,158,162)	(4,207,074)
December 31, 2012	\$ 232,988	\$ 26,893	\$ 259,881
Issuance of convertible notes	—	2,893,435	2,893,435
Changes in fair value	(232,988)	(2,670,317)	(2,903,305)
June 30, 2013	\$ —	\$ 250,011	\$ 250,011

The valuation of the convertible stock warrant liability is discussed in Note 6.

## 5. ACCRUED LIABILITIES

Accrued liabilities at June 30, 2013 and December 31, 2012, consisted of the following:

	June 30, 2013	December 31, 2012
Accrued liabilities and employee related benefits	\$ 65,746	\$ 18,746
Accrued interest	163,116	131,303
Total	<u>\$ 228,862</u>	<u>\$ 150,049</u>

## 6. CONVERTIBLE PROMISSORY NOTES AND DERIVATIVE LIABILITY

The Company previously owed the principal amount of \$230,000 to a total of six (6) investors who were issued Convertible Promissory Notes under the terms of a Convertible Promissory Note Agreement dated December 13, 2010 and amended on March 23, 2011 as follows:

Principal Amount	Issue Date	Maturity Date	Converted to Equity	Conversion Date
\$ 100,000	12-13-10	12-13-12	100,000	1-16-13
\$ 25,000	4-11-11	4-08-13		
\$ 35,000	4-15-11	4-15-13	35,000	6-11-12
\$ 10,000	4-22-11	4-22-13	10,000	5-31-12
\$ 50,000	4-27-11	4-27-13	50,000	1-16-13
\$ 10,000	4-08-11	4-08-13		

These notes bear interest at a rate of 5% per annum, with all principal and accrued interest payable on the maturity date. Principal and unpaid accrued interest due under these notes shall be automatically converted into common stock at the closing of our next equity financing in which the gross proceeds exceed \$1,000,000 (the "Next Equity Financing"), based on a conversion price equal to one-third of the price per share of the stock sold to outside investors in the Next Equity Financing. If the Next Equity Financing does not occur on or before the maturity date, the principal and unpaid accrued interest can be converted at our option into shares of our most recently closed equity financing, based on a conversion price equal to one-third of the price per share of the most recently closed equity financing. On May 30, 2012, at the request of a majority of the note holders, the Company modified the conversion terms to allow these notes to convert at a fixed price of \$0.04 at any time, with all other provisions remaining exactly the same.

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In addition, we previously owed the principal sum of \$41,537 to Molecular Medicine Research Institute (“MMRI”), who was issued a series of Convertible Promissory Notes under the terms of a Note and Warrant Purchase Agreement as follows:

<b>Principal Amount</b>	<b>Issue Date</b>	<b>Maturity Date</b>	
\$ 16,037	11-1-10	11-1-12	Note principal and accrued interest assigned June, 2012
\$ 4,250	12-1-10	12-1-12	Note principal and accrued interest assigned June, 2012
\$ 4,250	1-1-11	1-1-12	Note principal and accrued interest assigned June, 2012
\$ 4,250	2-1-11	2-1-12	Note principal and accrued interest assigned October, 2012
\$ 4,250	3-1-11	3-1-12	Note principal and accrued interest assigned October, 2012
\$ 4,250	4-1-11	4-1-12	
\$ 4,250	5-1-11	5-1-12	

These notes bear interest at a rate of 5% per annum, with all principal and accrued interest payable on demand by the holder on or after the maturity date. Principal and unpaid accrued interest due under these notes shall be converted, at the option of the holder, into our equity securities at the closing of our next equity financing in which the gross proceeds exceed \$1,000,000 (the “Next Equity Financing”), based on a conversion price equal to the price per share of the stock sold to outside investors in the Next Equity Financing. If the Next Equity Financing does not occur on or before the maturity date, the principal and unpaid accrued interest can be converted at our option into a new class of Preferred Stock, with the conversion price per share to be based upon a pre-money valuation of the company at that time of \$2,000,000. These notes also include 20% warrant coverage which expires seven years from the date of the note. In June and October 2012, \$33,037 of the note principal plus accrued interest was assigned to a new investor. Along with this assignment the warrants associated with these specific notes have been cancelled.

In August, 2012, we entered into a convertible note agreement with an investor for a principal amount of \$30,880. This note bears an interest rate of 12% per annum, compounded monthly, and has a maturity date of June 5, 2013. The note holder has the option to convert the note into common stock at any time, conversion at 55% of the lowest trading price over the prior three trading days from the date of conversion. We have the option to prepay the note at any time in the amount of 150% of the principal and unpaid accrued interest. This note is an assignment of a previous note. Also in September, 2012, the note holder converted \$10,805, and in October, 2012, the note holder converted \$19,145, into common shares of the Company.

We also owe the principal sum of \$500,000 to a total of ten (10) investors who were issued Secured Convertible Promissory Notes under the terms of a Senior Secured Convertible Promissory Note Agreement dated December 28, 2010, as amended May 20, 2011 as follows:

<b>Principal Amount</b>	<b>Issue Date</b>	<b>Maturity Date</b>	<b>Assigned</b>	
\$ 125,000	12-28-10	12-6-11	\$ 83,000 42,000	Assigned October and September 2012
\$ 62,500	12-28-10	12-6-11	62,500	Assigned January 2013
\$ 100,000	4-13-11	12-6-11	100,000	Assigned January 2013
\$ 25,000	4-13-11	12-6-11	25,000	Assigned January 2013
\$ 25,000	5-13-11	12-6-11	25,000	Assigned January 2013
\$ 50,000	5-16-11	12-6-11	50,000	Assigned January 2013
\$ 25,000	5-10-11	12-6-11	25,000	Assigned January 2013
\$ 25,000	5-24-11	12-6-11	25,000	Assigned January 2013
\$ 31,250	6-7-11	12-6-11	31,250	Assigned January 2013
\$ 31,250	6-3-11	12-6-11	31,250	Assigned January 2013

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Principal and interest, accrued at the rate of 5% per annum, was due and payable on December 6, 2011, unless earlier converted into equity securities of the company. Principal and unpaid accrued interest shall be converted, at the option of the holder, into equity securities of the company at the closing of our next equity financing in which gross aggregate proceeds to the Company exceed \$1,750,000 and the Company registers its stock for sale pursuant to the Securities Act of 1933. The conversion price shall be equal to one-third of the price per share of this financing. If this financing does not occur on or before the maturity date, the principal and unpaid accrued interest can be converted, at the option of the holders of a majority of the aggregate principal amount of the senior secured convertible promissory notes, into common stock of the Company. These notes were formerly secured by collateral consisting of substantially all assets of the company. Under the May 20, 2011 amendment to the Senior Secured Convertible Promissory Note Agreement, this security interest was terminated. Under the terms of the agreement as amended, we may not incur any indebtedness for borrowed money except pursuant to an agreement that provides that repayment of such indebtedness will be subordinated to repayment of the Notes. In addition, we may not encumber any of our property during such time as the Notes remain due and owing. As provided in the amendment, the note holders have warrant coverage equal to 100% of the note principal at an exercise price equal to 100% of that to outside investors in the closing of the next equity financing of \$1,175,000 or more, but not to be less than \$0.60 per share. The warrants expire five years from the date of the next equity financing closing. In January 2013, \$375,000 of the outstanding convertible notes were assigned to Dominion Capital LLC, who in February 2013 converted the notes into equity. Also in January 2013, this same investor settled all outstanding accrued interest related to the assigned notes in return for a convertible note of \$187,500 with a guaranteed interest of 25%, maturity on July 30, 2013, and a conversion price of \$0.015 per common share.

During the twelve months ended December 31, 2011, the Company issued convertible promissory notes to various investors for aggregate proceeds of \$100,000. Principal and interest on these convertible notes, accrued at the rate of 6% per annum, were due and payable 180 days from the issuance date, unless earlier converted into equity securities of the Company, at the option of the Holder of the promissory note. Conversion of the principal and interest will be at either \$0.10 or \$0.20 per share. In addition, the Company issued warrants to the note holders to purchase a number of shares of common stock issued to investors at the equivalent of 100% of the principal amount of the notes divided by the respective price per share of the stock which the principal of the note converts into. The warrants expire one year from the date of the note. All related warrants expired in 2012 unexercised. During the year ended December 31, 2012, \$57,000 of these convertible notes converted to Company common shares and another \$40,000 was assigned to another note holder in September 2012. In March 2013 the final note in the amount of \$3,000, issued September 26, 2011 was paid in full along with accrued interest.

<b>Principal</b>		<b>Maturity</b>	<b>Converted</b>			
<b>Amount</b>	<b>Issue Date</b>	<b>Date</b>	<b>to Equity</b>	<b>Assigned</b>	<b>Paid</b>	<b>Assigned or Conversion Date</b>
\$ 21,000	7-28-11	1-24-12	\$ 21,000			February 2012
\$ 21,000	7-28-11	1-24-12	\$ 21,000			February 2012
\$ 10,000	8-16-11	2-12-12		\$ 10,000		October 2012
\$ 20,000	8-18-11	2-14-12		\$ 20,000		September 2012
\$ 5,000	9-6-11	3-4-12	\$ 5,000			February 2012
\$ 5,000	9-9-11	3-7-12	\$ 5,000			February 2012
\$ 3,000	9-26-11	3-24-12			3,000	March 2013
\$ 5,000	11-2-11	4-30-12	\$ 5,000			February 2012
\$ 10,000	11-23-11	5-21-12		\$ 10,000		September 2012



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During the period January 1, 2012 through June 30, 2013, the Company issued convertible promissory notes to various investors for aggregate proceeds of \$545,608. Principal and interest on these convertible notes accrue at the rate of 6% per annum, are due and payable 180 days from the issuance date, unless earlier converted into equity securities of the Company, at the option of the Holder of the promissory note. Conversion of the principal and interest will be at either \$0.0016 or \$0.165 per share.

<b>Principal Amount</b>	<b>Issue Date</b>	<b>Maturity Date</b>	<b>Converted to Equity</b>	<b>Conversion Date</b>
\$ 5,000	12-30-11	6-27-12	\$ 5,000	February 2012
\$ 100,000	1-17-12	7-15-12	\$ 100,000	December 2012
\$ 3,750	2-21-12	8-19-12	\$ 3,750	February 2012
\$ 25,000	4-2-12	9-29-12	\$ 25,000	April 2012
\$ 5,000	5-18-12	11-14-12	\$ 5,000	December 2012
\$ 21,500	6-6-12	1-6-13	\$ 21,500	December 2012
\$ 13,000	6-6-12	12-3-12		
\$ 5,000	7-10-12	1-6-13	\$ 5,000	December 2012
\$ 50,000	8-23-12	2-19-13		
\$ 5,500	9-4-12	3-3-13	\$ 5,500	December 2012
\$ 5,000	9-21-12	3-20-13		
\$ 10,000	9-24-12	3-23-13		
\$ 21,000	10-2-12	3-31-13		
\$ 5,000	10-16-12	4-14-13	\$ 5,000	October 2012
\$ 19,900	10-26-12	4-24-13		
\$ 10,000	10-29-12	4-27-13	\$ 10,000	October 2012
\$ 11,437	10-30-12	10-30-13	\$ 11,437	November 2012
\$ 10,000	11-2-12	5-1-13	\$ 10,000	December 2012
\$ 7,500	11-2-12	5-1-13	\$ 7,500	November 2012
\$ 24,000	11-2-12	5-1-13	\$ 24,000	November 2012
\$ 10,000	11-5-12	5-4-13		
\$ 50,371	11-7-12	5-6-13		
\$ 20,000	11-8-12	5-7-13		
\$ 5,000	11-10-12	5-9-13	\$ 5,000	December 2012
\$ 6,000	11-13-12	5-12-13		
\$ 350	11-13-12	NA		
\$ 13,000	11-19-12	5-18-13		
\$ 25,000	5-13-13	11-9-13	\$ 25,000	May 2013
\$ 38,300	5-24-13	11-24-13		
\$ 20,000	6-5-13	12-2-13		

In August, 2012, \$6,066 of convertible note principle was issued as part of a unit debt instrument which consisted of a return on investment (“ROI”) agreement and a convertible promissory note in return for \$6,066. The ROI has a redemption value of \$6,672 due on demand and the convertible promissory note is for \$6,066, non-interest bearing, due February 21, 2013, and is convertible to common shares after six months from the date of the note at a conversion price that is 50% of the lowest trading price over the 20 prior trading days from the date of conversion notice.

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On November 14, 2012 the Company entered into a Convertible Promissory note agreement with Dominion Capital LLC in the principal amount of \$600,000, payable in four tranches, with a maturity date of June 3, 2013. The note bears an interest rate of 10% per annum until the note is paid in full, and can be converted into common shares of the Company at a price of \$0.10 per share subject to certain conditions. This note is repayable in 4 equal weekly installments of \$165,000 (\$150,000 principal and \$15,000 interest) commencing May 14, 2013. On January 30, 2013, the Company executed an amendment to the Convertible Promissory note payable to Dominion Capital, LLC providing for an increase in the purchase price for such note from \$600,000 to \$2,000,000, to be disbursed in tranches through April 26, 2013. The note has been amended to provide for an extended amortization schedule with a final maturity date of October 28, 2013. The Company has the option to pay the note in cash or stock at its discretion, subject to certain conditions. The Company intends to apply the proceeds from the amended Dominion note for working capital purposes. Dominion is not able to begin to convert the note until May 14, 2013. The Company received all \$600,000 from the initial agreement in 2012, and received the first tranche of funding of \$250,000 on January 30, 2013 and the final one in April 2013. As of June 30, 2013 the full \$2 million has been borrowed by the Company and the Company has been making payments on the note since May 2013 in \$165,000 installments, in stock, for a total of \$600,000 of principal and \$60,000 of interest. Aegis Capital served as placement agent on the transaction and received 10% in placement agent fees.

On June 7, 2013 the Company entered into a Securities Purchase Agreement (the "Bridge Financing") with Dominion Capital LLC pursuant to which the investor purchased an aggregate principal amount \$250,000 12% debentures due June 7, 2014, with a payment schedule of \$125,000 upon execution and \$125,000 within 30 days, all of which was received by the Company in June 2013. The Debentures are convertible into common stock at a conversion price of \$0.032 per share, subject to adjustment. The Company may repurchase this note at any time for 125% of the purchase price. Aegis Capital served as placement agent on the transaction and received 10% in placement agent fees.

The following notes were assigned between parties:

<b>Principal Amount</b>	<b>Issue Date</b>	<b>Maturity Date</b>	<b>Converted to Equity</b>	<b>Conversion Date</b>
\$ 43,000	12-12-12	Demand	\$ 43,000	Dec 2012 & Jan 2013
\$ 30,000	9-14-12	9/14/13	\$ 30,000	Sept & Oct '12
\$ 42,000	9-27-12	9-27-13	\$ 42,000	October 2012
\$ 9,202	10-2-12	Demand	\$ 9,202	December 2012
\$ 10,000	10-18-12	10-12-13	\$ 10,000	October 2012
\$ 40,000	10-24-12	Demand	\$ 30,000	Oct & Nov 2012
\$ 10,172	11-4-12	5-3-13	\$	

Accrued interest on two notes, totaling \$15,000 on January 28, 2013, were converted to common stock.

A number of the Company's convertible notes contain embedded derivatives wherein their automatic conversion, which is contingent upon a future equity raise, can accelerate the realization of the expected payout for each note. This feature creates the possibility of a greater than expected return for the note holder and thus a higher than expected liability for the Company. The value of this feature was estimated for each note using the probability expected return method, in which the payout of distinct potential early conversion scenarios was discounted to the present value using the expected IRR (Internal Rate of Return) of the note and compared with the present value of the note if held to maturity. Probabilities were applied to the value of early conversion in each scenario to arrive at a probability weighted value of the early conversion feature.

As of June 30, 2013 and December 31, 2012, the fair value of the derivative liability was \$250,011 and \$26,893, respectively. The changes in fair value of warrant and derivative liabilities for the three month periods ended June 30, 2013 and June 30, 2012 of \$671,943 and \$51,287 respectively, and for the six month periods ended June 30, 2013 and June 30, 2012 of \$572,370 and \$205,171 respectively, and the period from January 14, 2008 (date of inception) to June 30, 2013 of \$1,454,544 have been recorded in the accompanying condensed consolidated statements of operations as a component of other income (expense).

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At June 30, 2013, total future minimum payments under the notes payable are as follows:

2013	\$	1,560,715
Thereafter		—
Total principal	\$	<u>1,560,715</u>

At June 30, 2013, total future minimum payments under the convertible notes are as follows:

2013	\$	524,159
2014		250,000
Thereafter		—
Total principal		774,159
Less Debt discounts resulting from warrant and derivative liabilities		(99,998)
Net minimum payments	\$	<u>674,161</u>

## 7. COMMITMENTS AND CONTINGENCIES

**Commitments** — The Company leases its main office facility and a second facility for research in Sunnyvale, CA under sublease agreements that provide for month-to-month extensions by the Company.

Rent expense for the three months ended June 30, 2013 and 2012 was \$3,986 and \$10,078 respectively, and for the six months ended June 30, 2013 and 2012 was \$11,898 and \$19,414 respectively. For the period from January 14, 2008 (date of inception) to June 30, 2013, rent expense was \$293,608.

**Contingencies** — The Company is in non-payment of certain convertible notes that were due prior to June 30, 2013, and is also late with regard to making payments to various trade account vendors for goods and services received, of which some accounts are currently with collection agencies and could possibly result in lawsuits with the Company.

The Company agreed to compensate certain vendors for services rendered contingent upon the occurrence of future financings as follows:

Future financing with proceeds of at least		
\$	1,000,000	\$ 50,000
	1,250,000	20,000
	1,500,000	26,000
	2,000,000	50,000
	5,000,000	50,000
	6,000,000	20,000
Total	\$	<u>216,000</u>

The Company incurred various obligations related to the original acquisition of its intellectual property around the time the Company was founded. These transactions are described more fully below in Note 9, including a reference to contingent obligations reflected in the condensed consolidated financial statements.

## **8. STOCKHOLDERS' EQUITY**

In May 2012, the Company designated a class of preferred stock as Series A Convertible Preferred Stock consisting of 250,000 shares. On April 1, 2013 Amarantus BioScience, Inc. (the "Company") filed a Certificate of Designation with the State of Nevada designating a class of preferred stock as Series C Convertible Preferred Stock consisting of 750,000 shares. On April 2, 2013 the Company filed the Certificate of Designation with the State of Nevada formally creating the previously disclosed Series B Convertible Preferred Stock consisting of 2,500,000 shares.

Convertible preferred stock, \$0.001 par value - authorized, 10,000,000 shares, 250,000 shares designated as Series A, par value \$0.001, -0- and 250,000 shares issued and outstanding as of June 30, 2013 and December 31, 2012, respectively. During the six months ended June 30, 2013, 250,000 share of the Series A Convertible Preferred Stock was converted to 8,094,117 shares of common stock.

The Series B Convertible Preferred Stock has no anti-dilution provisions, can only be issued to officers, directors and advisors of the Company, and cannot be converted into common stock, transferred, sold or disposed of in any manner for 24 months. Convertible preferred stock, \$0.001 par value - authorized, 10,000,000 shares, 2,500,000 shares designated as Series B, par value \$0.001, -0- shares issued and outstanding as of June 30, 2013 and December 31, 2012.

The Series C Convertible Preferred Stock has no anti-dilution provisions, can only be issued to officers and directors of the Company, is convertible into a cumulative total of 750,000 common shares and is automatically convertible into common stock upon listing of the Company's common stock to a national stock exchange. Convertible preferred stock, \$0.001 par value - authorized, 10,000,000 shares, 750,000 shares designated as Series C, par value \$0.001, 375,000 and -0- shares issued and outstanding as of June 30, 2013 and December 31, 2012, respectively

## **9. SEGMENT REPORTING**

The Company operates in one reportable segment. The Company's Chief Executive Officer, who is considered to be the chief operating decision maker, manages the Company's operations as a whole and reviews financial information presented on a this basis, for purposes of evaluating financial performance and allocating resources.

## **10. RELATED-PARTY TRANSACTIONS**

The Company was co-founded in 2008 by Mr. Gerald Commissiong and Dr. John Commissiong under the original name of CNS Protein Therapeutics, Inc. ("CNS"), and changed its name to Amarantus BioSciences, Inc. in 2010, and currently Amerantus Bioscience Holdings, Inc. Dr. Commissiong is currently the Chief Scientific Officer, a member of the Board of Directors (appointed in March 2011) and majority shareholder of the Company. Mr. Gerald Commissiong is currently the Chief Operating Officer, a member of the Board of Directors, and a significant shareholder of the Company. Dr. Commissiong also founded Neurotrophics, Inc., a Canadian company, in 2003. In 2007, Neurotrophics established an agreement with EMS Development Group to acquire the intellectual property rights to a protein compound, mesencephalic astrocyte-derived neurotrophic factor ("MANF"), from Prescient Neuropharma Co. MANF was discovered by Dr. Commissiong while working for Prescient in 2002, as a drug candidate with promising therapeutic properties for treatment of syndromes such as Parkinson's Disease.

EMS received \$59,000 in 2007 in funding from Neurotrophics to purchase the MANF intellectual property rights. Prior to this payment, Neurotrophics received a total of \$100,000 in investments from certain outside parties. The same investors provided \$100,000 in funding to CNS in 2008, and CNS renegotiated and assumed the \$100,000 convertible note investment made into Neurotrophics. The investors directed Neurotrophics and EMS to assign the MANF intellectual property rights to CNS and CNS agreed to assume certain other liabilities related to the technology transfer. CNS will compensate these creditors on a future date mutually agreeable between the parties. In addition, CNS agreed to compensate EMS for its assistance in acquiring the rights to MANF by making installment payments in an aggregate amount of \$95,000.

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The technology transfer transaction created a contingent liability for the Company. Legal counsel to the Company has advised that transfers of assets out of the usual course of business, referred to under applicable Canadian law as "bulk sales", must comply with certain rules in order to avoid a potential voiding of the sale or transfer, making the purchaser liable to unpaid trade creditors, or creating an encumbrance on the assets transferred or sold. The transfer of the MANF rights by Neurotrophics to CNS may impose such obligations on CNS, as a purchaser. Counsel further advised that upon payment in full of all of the Neurotrophics debts outstanding as of March 5, 2008, no action can be successfully maintained to void or set aside the transfer of the MANF rights to CNS, and thus to the Company.

To remedy this contingent liability, CNS agreed to compensate Neurotrophics to repay its creditors on a future date mutually agreeable between the parties, and agreed to assume debts owed to John Commissiong and Gerald Commissiong by Neurotrophics.

The Company has recorded a total of \$-0- and \$-0- as of June 30, 2013 and December 31, 2012, respectively in obligations reflecting this liability in its condensed consolidated financial statements. The Company recorded the assumption of the Neurotrophics debts as a distribution in 2008.

In October 2010, the Company entered into an agreement with the founders, Gerald Commissiong and John Commissiong, where they will receive a 2.5% (1.25% each for Gerald Commissiong and John Commissiong) Royalty from the gross commercial revenue of patents derived from the Company's proprietary PhenoGuard platform technology, including patents associated with the MANF Protein and related Gene."

The Company obtained the services of its former Chairman Martin D. Cleary through a consulting agreement. During the three months ended June 30, 2013 and the year ended December 31, 2012, 2011, and the period from January 14, 2008 (date of inception) to December 31, 2012, consulting services of \$-0-, \$-0-, \$200,000, and \$479,166, respectively are included in the condensed consolidated statement of operations. This agreement also includes a change of control clause whereby the Company shall pay Mr. Cleary a bonus of 5% of the gross proceeds to the Company resulting from the change of control. Upon his election and in his sole discretion, and in lieu of the change of control bonus, the Company shall issue to him shares of the Company's common stock equal to 2.5% of the Company's fully diluted capitalization as of the date of termination of the agreement. Mr. Cleary resigned from the Company in July 2012.

In March 2012, a former and an existing Board of Director member converted a convertible promissory note in the amount of \$21,000, each plus accrued interest. This resulted in the issuance of 217,280 shares of common stock to each party. In addition, in March 2012 an existing Board of Director member converted a convertible promissory note in the amount of \$30,000. This resulted in the issuance of 608,300 shares of common stock. The same Board member also held \$160,172 of convertible promissory notes with the company as of December 31, 2012. \$100,000 of this convertible promissory note was converted in January, 2013, resulting in the issuance of 2,765,625 shares of common stock and a remaining note balance of \$60,172 as of June 30, 2013.

As of June 30, 2013 advances of \$69,273 and \$53,200 are due from John and Gerald Commissiong, respectively.

In January 2013 a current independent Board of Director member and his spouse both converted a Convertible Promissory Note in the amounts of \$100,000 and \$50,000, respectively, and accrued interest of \$15,000.

## **11. SUBSEQUENT EVENTS**

The Company evaluated subsequent events through the date that its financial statements were available for issuance.

On July 30, 2013, the Company received notice that The Depository Trust Company has determined to lift the deposit chill ("DTCC Chill") on the Company's common stock and has resumed accepting deposits for depository and book-entry transfer services.

On August 19, 2013, the Company entered into a securities purchase agreement with an institutional investor (the "Investor") pursuant to which the Company will issue shares of newly designated Series D 8% Convertible Preferred Stock ("Series D Preferred Stock") to the Investor in exchange for the Investor agreeing to paying off certain accounts payables of the Company, up to an aggregate approximate amount of \$1,250,000. In addition, the Company granted to the Investor the right to participate in future financings of the Company until 12 months from the date of the last closing.

On August 19, 2013, the Company filed a Certificate of Designation designating 1,300 of our preferred stock as Series D Preferred Stock. Each share of Series D Preferred Stock has a stated value of \$1,000 and pays on a quarterly basis 8% cumulative dividends per annum. Dividends are payable by the Company in cash or at the Company's option, in shares of common stock. The Series D Preferred Stock shall have no voting rights except in certain circumstances which would adversely affect the Series D Preferred Stock holders. Each share of Series D Preferred Stock is convertible at any time into shares of common stock by dividing the stated value per share by the then effective conversion price. The conversion price for the Series D Preferred Stock shall equal \$0.03 per share, subject to adjustment; provided, however, in the event that during any period that the Series D Preferred Stock is outstanding, a holder delivers a conversion notice within 5 trading days following a period that the average of 5 consecutive VWAPs is less than \$0.02, the conversion price shall be thereafter reduced, and only reduced, to equal the lesser of the then conversion price and 75% of the average of the lowest 5 consecutive VWAPs prior to the delivery of such conversion notice. The Series D Preferred Stock is also subject to redemption by the Company upon certain triggering events.

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

### Forward-Looking Statements

Certain statements, other than purely historical information, including estimates, projections, statements relating to our business plans, objectives, and expected operating results, and the assumptions upon which those statements are based, are forward-looking statements." These forward-looking statements generally are identified by the words believes," project," expects," anticipates," estimates," intends," strategy," plan," may," will," would," will be," will continue," will likely result," and similar expressions. Forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties which may cause actual results to differ materially from the forward-looking statements. Our ability to predict results or the actual effect of future plans or strategies is inherently uncertain. Factors which could have a material adverse affect on our operations and future prospects on a consolidated basis include, but are not limited to: changes in economic conditions, legislative/regulatory changes, availability of capital, interest rates, competition, and generally accepted accounting principles. These risks and uncertainties should also be considered in evaluating forward-looking statements and undue reliance should not be placed on such statements.

### Overview

Amarantus Bioscience Holdings, Inc. is a California-based development-stage biotechnology company founded in January 2008. We focus on developing our intellectual property and proprietary technology to develop drug candidates to treat human disease. We own the intellectual property rights to a therapeutic protein known as Mesencephalic-Astrocyte-derived Neurotrophic Factor (MANF"). MANF is a protein that corrects protein misfolding. Protein misfolding is one of the major causes of apoptosis (cell death). This property provides a compelling rationale for the research and development of MANF-based products as therapeutics for human disease. Our lead MANF product development effort is centered on a therapy for Parkinson's disease (PI).

In April 2013, the Company received the Final Report from the Swiss-based, neuroscience-focused consulting firm the Company had retained to conduct a full review of the data generated as a result of the Company's research grant with the Michael J. Fox Foundation entitled "Comparisons and Actions of MANF and GDNF in a Rodent Model of Parkinson's Disease".

In May 2013, the Company submitted a final report to the Michael J. Fox Foundation for Parkinson's Research Grant Award Progress Report for the grant "**Comparisons and Actions of MANF and GDNF in Rodent Models of Parkinson's Disease.**"

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The objectives of this study were (1) to confirm MANF's activity in the 6-OHDA model of PD, (2) to evaluate striatal and nigral administration of MANF, (3) to administer MANF in neuroprotection and neuroregeneration protocols, (4) to assess different dose levels of MANF, (5) to compare MANF with GDNF under identical experimental conditions, (6) to apply an array of behavioral, structural and functional measures, and (7) to measure diffusion of MANF after convection enhanced delivery. The results of the study included the following:

- £ MANF displayed strong neuroprotective activity when administered to the striatum as evidenced by normalized ipsilateral rotational behavior evoked by amphetamine and protection of TH+ cell bodies in the substantia nigra.
- £ MANF prevented the striatal 6-OHDA-induced decrease of striatal dopaminergic terminals when administered to the substantia nigra.
- £ MANF's activity is dependent on its location of administration and MANF's effects manifest themselves distal to the administration site. Striatal administration of MANF protects nigral cell bodies while nigral administration of MANF protects striatal dopaminergic fiber densities.
- £ MANF may display effects contralateral to the growth factor administration site.
- £ MANF could be delivered to the striatum by convection enhanced delivery and MANF diffusion and distribution volumes could be measured by immunohistochemistry.
- £ Continued MANF development for the treatment of PD is warranted based on the results of this present study, the known mechanism of action and published literature.

Amarantus licensed the intellectual property rights to a diagnostic blood test to diagnose Alzheimer's disease from Memory Dx, LLC in December 2012. LymPro is a diagnostic blood test that evaluates the quantities and concentrations of certain biomarkers in the blood with a scientific relationship to Alzheimer's based on cell cycling.

Amarantus acquired the intellectual property rights to 2 diagnostic blood test platforms known as NuroPro and BC-SeraPro from the bankruptcy estate of Power3 Medical Products. NuroPro is a neurodegenerative disease diagnostic platform with a lead application in Parkinson's disease. BC SeraPro is an oncology diagnostic platform with a lead application in Breast Cancer.

In May 2013, Company released an updated and corrected White Paper regarding its LymPro® Test for Alzheimer's disease. Specifically section 6.6 was added. The White Paper can be found on the Company's website at <http://ir.stockpr.com/amarantus/scientific-publications>.

We also own an inventory of 88 cell lines that we refer to as PhenoGuard Cell Lines. MANF was the first therapeutic protein discovered from a PhenoGuard Cell Line. We believe that we may identify additional therapeutic proteins from our inventory of PhenoGuard Cell Lines.

## **Principal Products in Development**

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. Since inception, the Company's research team has been focused on developing MANF as a therapeutic for Parkinson's disease, and other apoptosis-related disorders. The Company's business plans are focused in these specific areas:

Development of MANF to treat PD, and secondarily other apoptosis-related disorders including ischemic heart disease, traumatic brain injury and organ transplantation;

Development of LymPro as a blood test to diagnose Alzheimer's disease in its earliest stages, and secondarily further research of NuroPro and BC-SeraPro to diagnose neurodegenerative diseases and breast cancer;

Exploration of the Company's PhenoGuard platform for drug candidate screening and discovery; and

Evaluation of external drug candidates for potential in-licensure or acquisition.

For the next 12 months, the Company intends to focus on the development of MANF and the development of LymPro. The Company intends to use minimal resources and look for appropriate research partnership opportunities to further develop its BC-SeraPro, NuroPro and PhenoGuard assets.

## **Results of Operations**

### ***The Three Months Ended June 30, 2013 and June 30, 2012***

During the three months ended June 30, 2013, Amarantus generated no revenue and incurred \$1,304,475 in operating expenses, resulting in a loss from operations of \$1,304,475. Operating expenses consisted of research and development costs of \$474,671 and general and administrative expenses of \$829,804. During the three months ended June 30, 2013, Amarantus incurred interest expense of \$268,353 and other income of \$671,943 related to a change in fair value of warrant and derivative liabilities. Amarantus' net loss for the three months ended June 30, 2013 was \$900,885. Stock based compensation from grants under the 2008 Stock Plan and the 2012 Series B Convertible Preferred Stock Option Plan accounted for \$89,353 of the \$900,885 net loss for the three months ended June 30, 2013.

During the three months ended June 30, 2012, Amarantus generated no revenue and incurred \$934,682 in operating expenses, resulting in a loss from operations of \$934,682. Operating expenses consisted of research and development costs of \$359,829 and general and administrative expenses of \$574,853. During the three months ended June 30, 2012, Amarantus incurred interest expense of \$111,932 and other income of \$51,287 related to a change in fair value of warrant and derivative liabilities. Amarantus' net loss for the three months June 30, 2012 was \$995,327. Stock based compensation from grants under the 2008 Stock Plan and the 2012 Series B Convertible Preferred Stock Option Plan accounted for \$343,903 of the \$995,327 net loss for the three months ended June 30, 2012.

### ***The Six Months Ended June 30, 2013 and June 30, 2012***

During the six months ended June 30, 2013, Amarantus generated no revenue and incurred \$3,189,072 in operating expenses, resulting in a loss from operations of \$3,189,072. Operating expenses consisted of research and development costs of \$1,138,596 and general and administrative expenses of \$2,050,476. During the six months ended June 30, 2013, Amarantus incurred interest expense of \$1,141,471 and other income of \$572,370 related to a change in fair value of warrant and derivative liabilities. Amarantus' net loss for the six months June 30, 2013 was \$3,758,173. Stock compensation from grants under the 2008 Stock Plan and the 2012 Series B Convertible Preferred Stock Option Plan accounted for \$597,582 of the \$3,758,173 net loss for the six months ended June 30, 2013.



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During the six months ended June 30, 2012, Amarantus generated no revenue and incurred \$2,300,447 in operating expenses, resulting in a loss from operations of \$2,300,447. Operating expenses consisted of research and development costs of \$435,745 and general and administrative expenses of \$1,864,702. During the six months ended June 30, 2012, Amarantus incurred interest expense of \$217,382 and other income of \$205,171 related to a change in fair value of warrant and derivative liabilities. Amarantus' net loss for the six months June 30, 2012 was \$2,312,658. Stock compensation from grants under the 2008 Stock Plan and the 2012 Series B Convertible Preferred Stock Option Plan accounted for \$1,400,760 of the \$2,312,658 net loss for the six months ended June 30, 2012.

Inflation adjustments have had no material impact on the Company.

### **Off-Balance-Sheet Arrangements**

Pursuant to the terms of certain contractual agreements, we have agreed to compensate certain vendors for services rendered contingent upon the occurrence of future financings. These transactions are described more fully under Liquidity and Capital Resources, below, and in Note 7 to our condensed consolidated financial statements. These obligations are not reflected in our accounts and represent an off balance sheet liability contingent upon achieving the respective funding levels specified in the relevant agreements.

### **Liquidity and Capital Resources**

As of June 30, 2013, we had current assets in the amount of \$481,038 consisting of \$67,071 in cash and cash equivalents and \$413,967 in prepaid expenses and other current assets. As of June 30, 2013, we had current liabilities in the amount of \$5,576,483 consisting of \$2,617,006 in accounts payable, \$228,862 in accrued liabilities, \$245,728 in related party liabilities, \$1,560,715 in notes payable, \$250,011 in the current portion of derivative liabilities, and \$674,161 in the current portion of convertible promissory notes net of debt discount. As of June 30, 2013, we had a working capital deficit in the amount of \$5,095,445.

We will need to raise significant financing in order to continue to operate and execute our business plan. We estimate that it will cost at least \$1,000,000 to complete our next major milestone. Additionally, we will need ongoing operating capital to retain employees, pay creditors and ongoing expenses, as well as execute non-core aspects of our business plan, which management believes will yield significant value to its shareholders.

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 shareholders loans. We do not have any formal commitments or arrangements for the sales of stock or the advancement or borrowing of funds at this time. 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.

We were founded in 2008 to advance novel therapies for human disease. We were seeking to raise capital from new investors when the financial-collapse of 2008 resulted in a prolonged depression. This financial collapse dramatically altered the financing environment for biotechnology companies seeking to access the capital markets to obtain financing to advance their research and development activities. The trend of difficult access to the capital markets has continued through to the current fundraising environment and has been evidenced by reduced pricing and lower capital raises in many biotechnology-related initial public offerings.

We have been successful in raising convertible note financing from various individual investors over the last several months and more recently have raised a significant amount of funds from a specific financial institution. This is an encouraging trend that we will continue as we continue our operations. We will continue to use commercially-reasonable efforts going forward to raise equity financing and other financing arrangements to raise sufficient capital to continue our operations and meet our major milestones.

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On August 19, 2013, we entered into a securities purchase agreement with an institutional investor (the "Investor") pursuant to which we will issue shares of newly designated Series D 8% Convertible Preferred Stock ("Series D Preferred Stock") to the Investor in exchange for the Investor agreeing to paying off certain accounts payables of the Company, up to an aggregate approximate amount of \$1,250,000. In addition, we granted to the Investor the right to participate in our future financings until 12 months from the date of the last closing.

On August 19, 2013, we filed a Certificate of Designation designating 1,300 of its preferred stock as Series D Preferred Stock. Each share of Series D Preferred Stock has a stated value of \$1,000 and pays on a quarterly basis 8% cumulative dividends per annum. Dividends are payable by us in cash or at our option, in shares of common stock. The Series D Preferred Stock shall have no voting rights except in certain circumstances which would adversely affect the Series D Preferred Stock holders. Each share of Series D Preferred Stock is convertible at any time into shares of common stock by dividing the stated value per share by the then effective conversion price. The conversion price for the Series D Preferred Stock shall equal \$0.03 per share, subject to adjustment; provided, however, in the event that during any period that the Series D Preferred Stock is outstanding, a holder delivers a conversion notice within 5 trading days following a period that the average of 5 consecutive VWAPs is less than \$0.02, the conversion price shall be thereafter reduced, and only reduced, to equal the lesser of the then conversion price and 75% of the average of the lowest 5 consecutive VWAPs prior to the delivery of such conversion notice. The Series D Preferred Stock is also subject to redemption by us upon certain triggering events.

### **Going Concern**

We are a development stage company engaged in biotechnology research and development. We have suffered recurring losses from operations since inception, have a working capital deficit, and have generated negative cash flow from operations. For these reasons, our auditors have raised a substantial doubt about our ability to continue as a going concern.

### **Critical Accounting Policies**

Refer to Note 3 of the condensed consolidated financial statements.

### **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 June 30, 2013. This evaluation was carried out under the supervision and with the participation of Gerald E. Commissiong, our Chief Executive Officer, and Marc E. Faerber, our Chief Financial Officer. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2013, 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. As of June 30, 2013, we did not have sufficient funds to hire additional employees.

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 Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

### **Limitations on the Effectiveness of Internal Controls**

Our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will necessarily prevent all fraud and material error. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the internal control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, control may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. There have been no changes in our internal controls over financial reporting during the three months ended June 30, 2013.

## PART II - OTHER INFORMATION

### Item 1. Legal Proceedings

We are 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 29, 2013, we issued 375,000 shares of our restricted common stock to Network 1 Financial Services for services related to various convertible debt holders. 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 4(2) promulgated thereunder due to the fact that the issuance did not involve a public offering.

On January 29, 2013, we issued 562,500 shares of our restricted common stock to Mario Marsillo for services related to various convertible debt holders. These shares were issued pursuant to the exemptions from the registration requirements of the Securities Act of 1933, as amended, afforded us under Section 4(2) promulgated thereunder due to the fact that the issuance did not involve a public offering.

On January 29, 2013, we issued 562,500 shares of our restricted common stock to Vincent Labarbara for services related to various convertible debt holders. These shares were issued pursuant to the exemptions from the registration requirements of the Securities Act of 1933, as amended, afforded us under Section 4(2) promulgated thereunder due to the fact that the issuance did not involve a public offering.

On April 3, 2013, we issued 1,500,000 restricted shares of our restricted common stock to Avidity IP Limited for legal services. These shares were issued pursuant to the exemptions from the registration requirements of the Securities Act of 1933, as amended, afforded us under Section 4(2) promulgated thereunder due to the fact that the issuance did not involve a public offering.

On May 13, 2013, we issued 833,333 shares of our restricted common stock to International Infusion LLC related to the conversion of a convertible note into common stock. These shares were issued pursuant to the exemptions from the registration requirements of the Securities Act of 1933, as amended, afforded us under Section 4(2) promulgated thereunder due to the fact that the issuance did not involve a public offering.

On June 28, 2013, we issued 7,307,692 shares of our restricted common stock to Neuroscience Associates, Inc. related to technical research services provided. These shares were issued pursuant to the exemptions from the registration requirements of the Securities Act of 1933, as amended, afforded us under Section 4(2) promulgated thereunder due to the fact that the issuance did not involve a public offering.

### Item 5. Other Information

On August 19, 2013, we entered into a securities purchase agreement with an institutional investor (the "Investor") pursuant to which we will issue shares of newly designated Series D 8% Convertible Preferred Stock ("Series D Preferred Stock") to the Investor in exchange for the Investor agreeing to paying off certain accounts payables of the Company, up to an aggregate approximate amount of \$1,250,000. In addition, we granted to the Investor the right to participate in our future financings until 12 months from the date of the last closing.

On August 19, 2013, we filed a Certificate of Designation designating 1,300 of our preferred stock as Series D Preferred Stock. Each share of Series D Preferred Stock has a stated value of \$1,000 and pays on a quarterly basis 8% cumulative dividends per annum. Dividends are payable by us in cash or at our option, in shares of common stock. The Series D Preferred Stock shall have no voting rights except in certain circumstances which would adversely affect the Series D Preferred Stock holders. Each share of Series D Preferred Stock is convertible at any time into shares of common stock by dividing the stated value per share by the then effective conversion price. The conversion price for the Series D Preferred Stock shall equal \$0.03 per share, subject to adjustment; provided, however, in the event that during any period that the Series D Preferred Stock is outstanding, a holder delivers a conversion notice within 5 trading days following a period that the average of 5 consecutive VWAPs is less than \$0.02, the conversion price shall be thereafter reduced, and only reduced, to equal the lesser of the then conversion price and 75% of the average of the lowest 5 consecutive VWAPs prior to the delivery of such conversion notice. The Series D Preferred Stock is also subject to redemption by us upon certain triggering events.

### Item 6. Exhibits

Exhibit Number	Description of Exhibit
3.1	<a href="#">Certificate of Designation</a>
10.1	<a href="#">Securities Purchase Agreement dated as of August 19, 2013</a>
31.1	<a href="#">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</a>
31.2	<a href="#">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</a>
32.1	<a href="#">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</a>
32.2	<a href="#">Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>
*101	The following materials from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013 formatted in Extensible Business Reporting Language (XBRL).

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## 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: August 19, 2013

By: /s/ Gerald E. Commissiong  
Gerald E. Commissiong  
Title: **Chief Executive Officer and Director**

By: /s/ Marc E. Faerber  
Marc E. Faerber  
Title: **Chief Financial Officer**



**AMARANTUS BIOSCIENCE HOLDINGS, INC.**  
**CERTIFICATE OF DESIGNATION OF PREFERENCES,**  
**RIGHTS AND LIMITATIONS**  
**OF**  
**SERIES D 8% CONVERTIBLE PREFERRED STOCK**

(PURSUANT TO NRS 78.1955)

The undersigned, Gerald E. Commissiong and Marc E. Faerber, do hereby certify that:

1. They are the President and Secretary, respectively, of Amaranus BioScience Holdings, Inc., a Nevada corporation (the "Corporation").

2. The Corporation is authorized to issue 10,000,000 shares of preferred stock, an of which 2,448,000 shares of Series B Convertible Preferred Stock and 375,000 shares of Series C Convertible Preferred Stock have been issued.

3. The following resolutions were duly adopted by the board of directors of the Corporation (the "Board of Directors"):

WHEREAS, the certificate of incorporation of the Corporation, as amended, provides for a class of its authorized stock known as preferred stock, consisting of 10,000,000 shares, \$0.001 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized to fix the dividend rights, dividend rate, voting rights, conversion rights, rights and terms of redemption and liquidation preferences of any wholly unissued series of preferred stock and the number of shares constituting any series and the designation thereof, of any of them; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as aforesaid, to fix the rights, preferences, restrictions and other matters relating to a series of the preferred stock, which shall consist of, except as otherwise set forth in the Purchase Agreement, up to 1,300 shares of the preferred stock which the Corporation has the authority to issue, as follows:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors does hereby provide for the issuance of a series of preferred stock for cash or exchange of other securities, rights or property and does hereby fix and determine the rights, preferences, restrictions and other matters relating to such series of preferred stock as follows:

## TERMS OF PREFERRED STOCK

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

“Affiliate” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 of the Securities Act.

“Alternate Consideration” shall have the meaning set forth in Section 7(e).

“Bankruptcy Event” means any of the following events: (a) the Corporation or any Significant Subsidiary (as such term is defined in Rule 1-02(w) of Regulation S-X) thereof commences a case or other proceeding under any bankruptcy, reorganization, arrangement, adjustment of debt, relief of debtors, dissolution, insolvency or liquidation or similar law of any jurisdiction relating to the Corporation or any Significant Subsidiary thereof, (b) there is commenced against the Corporation or any Significant Subsidiary thereof any such case or proceeding that is not dismissed within 60 days after commencement, (c) the Corporation or any Significant Subsidiary thereof is adjudicated insolvent or bankrupt or any order of relief or other order approving any such case or proceeding is entered, (d) the Corporation or any Significant Subsidiary thereof suffers any appointment of any custodian or the like for it or any substantial part of its property that is not discharged or stayed within 60 calendar days after such appointment, (e) the Corporation or any Significant Subsidiary thereof makes a general assignment for the benefit of creditors, (f) the Corporation or any Significant Subsidiary thereof calls a meeting of its creditors with a view to arranging a composition, adjustment or restructuring of its debts, or (g) the Corporation or any Significant Subsidiary thereof, by any act or failure to act, expressly indicates its consent to, approval of or acquiescence in any of the foregoing or takes any corporate or other action for the purpose of effecting any of the foregoing.

“Base Conversion Price” shall have the meaning set forth in Section 7(b).

“Beneficial Ownership Limitation” shall have the meaning set forth in Section 6(d).

“Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Buy-In” shall have the meaning set forth in Section 6(c)(iv).



“Change of Control Transaction” means the occurrence after the date hereof of any of (a) an acquisition after the date hereof by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Corporation, by contract or otherwise) of in excess of 40% of the voting securities of the Corporation (other than by means of conversion of Preferred Stock), (b) the Corporation merges into or consolidates with any other Person, or any Person merges into or consolidates with the Corporation and, after giving effect to such transaction, the stockholders of the Corporation immediately prior to such transaction own less than 60% of the aggregate voting power of the Corporation or the successor entity of such transaction, (c) the Corporation sells or transfers all or substantially all of its assets to another Person and the stockholders of the Corporation immediately prior to such transaction own less than 60% of the aggregate voting power of the acquiring entity immediately after the transaction, (d) a replacement at one time or within a one year period of more than one-half of the members of the Board of Directors which is not approved by a majority of those individuals who are members of the Board of Directors on the Original Issue Date (or by those individuals who are serving as members of the Board of Directors on any date whose nomination to the Board of Directors was approved by a majority of the members of the Board of Directors who are members on the Original Issue Date), or (e) the execution by the Corporation of an agreement to which the Corporation is a party or by which it is bound, providing for any of the events set forth in clauses (a) through (d) above.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the Corporation’s common stock, par value \$0.001 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Corporation or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Conversion Amount” means the sum of the Stated Value at issue.

“Conversion Date” shall have the meaning set forth in Section 6(a).

“Conversion Price” shall have the meaning set forth in Section 6(b).

“Conversion Shares” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Preferred Stock in accordance with the terms hereof.

“Dilutive Issuance” shall have the meaning set forth in Section 7(b).

“Dilutive Issuance Notice” shall have the meaning set forth in Section 7(b).

“Dividend Conversion Rate” means the lesser of (a) the Conversion Price or (b) 75% of the lesser of (i) the average of the VWAPs for the 20 consecutive Trading Days ending on the Trading Day that is immediately prior to the applicable Dividend Payment Date or (ii) the average of the VWAPs for the 20 consecutive Trading Days ending on the Trading Day that is immediately prior to the date the applicable Dividend Conversion Shares are issued and delivered if such delivery is after the Dividend Payment Date.

“Dividend Conversion Shares” shall have the meaning set forth in Section 3(a).

“Dividend Notice Period” shall have the meaning set forth in Section 3(a).

“Dividend Payment Date” shall have the meaning set forth in Section 3(a).

“Dividend Share Amount” shall have the meaning set forth in Section 3(a).

“Equity Conditions” means, during the period in question, (a) the Corporation shall have duly honored all conversions scheduled to occur or occurring by virtue of one or more Notices of Conversion of the applicable Holder on or prior to the dates so requested or required, if any, (b) the Corporation shall have paid all liquidated damages and other amounts owing to the applicable Holder in respect of the Preferred Stock, (c) all of the Conversion Shares issuable pursuant to the Transaction Documents (and shares issuable in lieu of cash payments of dividends) may be resold pursuant to Rule 144 without volume or manner-of-sale restrictions or current public information requirements as determined by the counsel to the Corporation as set forth in a written opinion letter to such effect, addressed and acceptable to the Transfer Agent and the affected Holders, (d) the Common Stock is trading on a Trading Market and all of the shares issuable pursuant to the Transaction Documents are listed or quoted for trading on such Trading Market (and the Corporation believes, in good faith, that trading of the Common Stock on a Trading Market will continue uninterrupted for the foreseeable future), (e) there is a sufficient number of authorized, but unissued and otherwise unreserved, shares of Common Stock for the issuance of all of the shares then issuable pursuant to the Transaction Documents, (f) there is no existing Triggering Event and no existing event which, with the passage of time or the giving of notice, would constitute a Triggering Event, (g) the issuance of the shares in question to the applicable Holder would not violate the limitations set forth in Section 6(d) herein, (h) there has been no public announcement of a pending or proposed Fundamental Transaction or Change of Control Transaction that has not been consummated and (i) the applicable Holder is not in possession of any information provided by the Corporation that constitutes, or may constitute, material non-public information.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Exempt Issuance” means the issuance of (a) shares of Common Stock or options to employees, officers or directors of the Corporation pursuant to the Company’s existing stock option plan or any stock or option plan duly adopted by a majority of the non-employee members of the Board of Directors of the Corporation or a majority of the members of a committee of non-employee directors established for such purpose; provided, however, such issuances to consultants under this clause (a) shall not exceed five (5%) percent of the issued and outstanding shares of the Corporation in any fiscal quarter, (b) securities upon the exercise or exchange of or conversion of any Securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock, issued and outstanding on the date of this Agreement (including issuances pursuant to the Company’s 8% Original Issue Discount Senior Secured Convertible Debentures issued concurrently or shortly after the Original Issue Date or any warrants issuable in connection therewith), or pursuant to other agreements of the Company existing prior to the date hereof and listed on Schedule 3.1(g) of the Purchase Agreement, provided that such securities and/or agreements have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities, and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Corporation, provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Corporation and shall provide to the Corporation additional benefits in addition to the investment of funds, but shall not include a transaction in which the Corporation is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

“Fundamental Transaction” shall have the meaning set forth in Section 7(e).

“GAAP” means United States generally accepted accounting principles.

“Holder” shall have the meaning given such term in Section 2.

“Indebtedness” means (a) any liabilities for borrowed money or amounts owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business), (b) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Corporation’s balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business, and (c) the present value of any lease payments in excess of \$50,000 due under leases required to be capitalized in accordance with GAAP.

“Junior Securities” means the Common Stock and all other Common Stock Equivalents of the Corporation other than those securities which are explicitly senior or pari passu to the Preferred Stock in dividend rights or liquidation preference.

“Liens” means a lien, charge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“Liquidation” shall have the meaning set forth in Section 5.

“New York Courts” shall have the meaning set forth in Section 11(d).

“Notice of Conversion” shall have the meaning set forth in Section 6(a).

“Original Issue Date” means the date of the first issuance of any shares of the Preferred Stock regardless of the number of transfers of any particular shares of Preferred Stock and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Preferred Stock” shall have the meaning set forth in Section 2.

“Purchase Agreement” means the Securities Purchase Agreement, dated on or about the Original Issue Date, among the Corporation and the original Holders, as amended, modified or supplemented from time to time in accordance with its terms.

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Securities” means the Preferred Stock and the Conversion Shares.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Share Delivery Date” shall have the meaning set forth in Section 6(c).

“Stated Value” shall have the meaning set forth in Section 2, as the same may be increased pursuant to Section 3.

“Subscription Amount” shall mean, as to each Holder, the aggregate amount to be paid for the Preferred Stock purchased pursuant to the Purchase Agreement as specified below such Holder’s name on the signature page of the Purchase Agreement and next to the heading “Subscription Amount,” in United States dollars and in immediately available funds.

“Subsidiary” means any subsidiary of the Corporation as set forth on Schedule 3.1(a) of the Purchase Agreement and shall, where applicable, also include any direct or indirect subsidiary of the Corporation formed or acquired after the date of the Purchase Agreement.

“Successor Entity” shall have the meaning set forth in Section 7(e).

“Trading Day” means a day on which the principal Trading Market is open for business.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE MKT, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange or the OTC Bulletin Board (or any successors to any of the foregoing).

“Transaction Documents” means this Certificate of Designation, the Purchase Agreement, the Transfer Agent Instruction Letter, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated pursuant to the Purchase Agreement.

“Transfer Agent” means VStock Transfer, LLC, the current transfer agent of the Corporation with a mailing address of 77 Spruce Street, Suite 201, Cedarhurst, New York 11516 and a facsimile number of (646) 536-3179, and any successor transfer agent of the Corporation.

“Transfer Agent Instruction Letter” shall have the meaning ascribed to such term in the Purchase Agreement.

“Triggering Event” shall have the meaning set forth in Section 10(a).

“Triggering Redemption Amount” means, for each share of Preferred Stock, the sum of (a) the greater of (i) 130% of the Stated Value and (ii) the product of (y) the VWAP on the Trading Day immediately preceding the date of the Triggering Event and (z) the Stated Value divided by the then Conversion Price, (b) all accrued but unpaid dividends thereon and (c) all liquidated damages and other costs, expenses or amounts due in respect of the Preferred Stock.

“Triggering Redemption Payment Date” shall have the meaning set forth in Section 10(b).

“Variable Rate Transaction” shall have the meaning ascribed to such term in Section 4.13(b) of the Purchase Agreement.

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if the OTC Bulletin Board is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the OTC Bulletin Board, (c) if the Common Stock is not then listed or quoted for trading on the OTC Bulletin Board and if prices for the Common Stock are then reported in the “Pink Sheets” published by Pink OTC Markets, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holders of a majority in interest of the Securities then outstanding and reasonably acceptable to the Corporation, the fees and expenses of which shall be paid by the Corporation.

Section 2. Designation, Amount and Par Value. The series of preferred stock shall be designated as its Series D 8% Convertible Preferred Stock (the “Preferred Stock”) and the number of shares so designated shall be up to 2,000 (which shall not be subject to increase without the written consent of all of the holders of the Preferred Stock (each, a “Holder” and collectively, the “Holders”). Each share of Preferred Stock shall have a par value of \$0.001 per share and a stated value equal to \$1,000, subject to increase set forth in Section 3 below (the “Stated Value”).

### Section 3. Dividends.

a) Dividends in Cash or in Kind. Holders shall be entitled to receive, and the Corporation shall pay, cumulative dividends at the rate per share (as a percentage of the Stated Value per share) of 8% per annum (subject to increase pursuant to Section 10(b)), payable quarterly on January 1, April 1, July 1 and October 1, beginning on the first such date after the Original Issue Date and on each Conversion Date (with respect only to Preferred Stock being converted) (each such date, a “Dividend Payment Date”) (if any Dividend Payment Date is not a Trading Day, the applicable payment shall be due on the next succeeding Trading Day) in cash, or at the Corporation’s option, in duly authorized, validly issued, fully paid and non-assessable shares of Common Stock as set forth in this Section 3(a), or a combination thereof (the dollar amount to be paid in shares of Common Stock, the “Dividend Share Amount”). The form of dividend payments to each Holder shall be determined in the following order of priority: (i) if funds are legally available for the payment of dividends and the Equity Conditions have not been met during the 20 consecutive Trading Days immediately prior to the applicable Dividend Payment Date (the “Dividend Notice Period”), in cash only, (ii) if funds are legally available for the payment of dividends and the Equity Conditions have been met during the Dividend Notice Period, at the sole election of the Corporation, in cash or shares of Common Stock which shall be valued at the Dividend Conversion Rate, (iii) if funds are not legally available for the payment of dividends and the Equity Conditions have been met during the Dividend Notice Period, in shares of Common Stock which shall be valued at the Dividend Conversion Rate, and (iv) if funds are not legally available for the payment of dividends and the Equity Conditions have not been met during the Dividend Notice Period, then, at the election of such Holder, such dividends shall accrue to the next Dividend Payment Date or shall be accreted to, and increase, the outstanding Stated Value. In addition, as a condition to paying dividends in shares of Common Stock, as to such Dividend Payment Date, prior to such Dividend Notice Period (but not more than five (5) Trading Days prior to the commencement of such Dividend Notice Period), the Corporation shall have delivered to each Holder’s account with The Depository Trust Company a number of shares of Common Stock to be applied against such Dividend Share Amount equal to the quotient of (x) the applicable Dividend Share Amount divided by (y) the Dividend Conversion Rate, assuming for such purposes that the Dividend Payment Date is the Trading Day immediately prior to the commencement of the Dividend Notice Period (the “Dividend Conversion Shares”). The Holders shall have the same rights and remedies with respect to the delivery of any such shares as if such shares were being issued pursuant to Section 6 herein.

b) Corporation's Ability to Pay Dividends in Cash or Kind. The Corporation shall promptly notify the Holders at any time the Corporation shall become able or unable, as the case may be, to legally pay cash dividends. If at any time the Corporation has the right to pay dividends in cash or shares of Common Stock, the Corporation must provide the Holders with at least 20 Trading Days' notice of its election to pay a regularly scheduled dividend in shares of Common Stock (the Corporation may indicate in such notice that the election contained in such notice shall continue for later periods until revised by a subsequent notice). The aggregate number of shares of Common Stock otherwise issuable to a Holder on a Dividend Payment Date shall be reduced by the number of shares of Common Stock previously issued to such Holder in connection with such Dividend Payment Date. If any Dividend Conversion Shares are issued to a Holder in connection with a Dividend Payment Date and are not applied against a Dividend Share Amount, then such Holder shall promptly return such excess shares to the Corporation.

c) Dividend Calculations. Dividends on the Preferred Stock shall be calculated on the basis of a 360-day year, consisting of twelve 30 calendar day periods, and shall accrue daily commencing on the Original Issue Date, and shall be deemed to accrue from such date whether or not earned or declared and whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. Payment of dividends in shares of Common Stock shall otherwise occur pursuant to Section 6(c)(i) herein and, solely for purposes of the payment of dividends in shares, the Dividend Payment Date shall be deemed the Conversion Date. Dividends shall cease to accrue with respect to any Preferred Stock converted, provided that, the Corporation actually delivers the Conversion Shares within the time period required by Section 6(c)(i) herein. Except as otherwise provided herein, if at any time the Corporation pays dividends partially in cash and partially in shares, then such payment shall be distributed ratably among the Holders based upon the number of shares of Preferred Stock held by each Holder on such Dividend Payment Date.

d) Late Fees. Any dividends, whether paid in cash or shares of Common Stock, that are not paid within three Trading Days following a Dividend Payment Date shall continue to accrue and shall entail a late fee, which must be paid in cash, at the rate of 18% per annum or the lesser rate permitted by applicable law which shall accrue daily from the Dividend Payment Date through and including the date of actual payment in full.

e) Other Securities. So long as any Preferred Stock shall remain outstanding, neither the Corporation nor any Subsidiary thereof shall redeem, purchase or otherwise acquire directly or indirectly any Junior Securities except as expressly permitted by Section 10(a)(v). So long as any Preferred Stock shall remain outstanding, neither the Corporation nor any Subsidiary thereof shall directly or indirectly pay or declare any dividend or make any distribution upon (other than a dividend or distribution described in Section 6 or dividends due and paid in the ordinary course on preferred stock of the Corporation at such times when the Corporation is in compliance with its payment and other obligations hereunder), nor shall any distribution be made in respect of, any Junior Securities as long as any dividends due on the Preferred Stock remain unpaid, nor shall any monies be set aside for or applied to the purchase or redemption (through a sinking fund or otherwise) of any Junior Securities or shares pari passu with the Preferred Stock.

Section 4. Voting Rights. Except as otherwise provided herein or as otherwise required by law, the Preferred Stock shall have no voting rights. However, as long as any shares of Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of the Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Preferred Stock or alter or amend this Certificate of Designation, (b) authorize or create any class of stock ranking as to dividends, redemption or distribution of assets upon a Liquidation (as defined in Section 5) senior to, or otherwise pari passu with, the Preferred Stock, (c) amend its certificate of incorporation or other charter documents in any manner that adversely affects any rights of the Holders, (d) increase the number of authorized shares of Preferred Stock, or (e) enter into any agreement with respect to any of the foregoing.

Section 5. Liquidation. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a "Liquidation"), the Holders shall be entitled to receive out of the assets, whether capital or surplus, of the Corporation an amount equal to the Stated Value, plus any accrued and unpaid dividends thereon and any other fees or liquidated damages then due and owing thereon under this Certificate of Designation, for each share of Preferred Stock before any distribution or payment shall be made to the holders of any Junior Securities, and if the assets of the Corporation shall be insufficient to pay in full such amounts, then the entire assets to be distributed to the Holders shall be ratably distributed among the Holders in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full. A Fundamental Transaction or Change of Control Transaction shall not be deemed a Liquidation. The Corporation shall mail written notice of any such Liquidation, not less than 45 days prior to the payment date stated therein, to each Holder.



Section 6. Conversion.

a) Conversions at Option of Holder. Each share of Preferred Stock shall be convertible, at any time and from time to time from and after the Original Issue Date at the option of the Holder thereof, into that number of shares of Common Stock (subject to the limitations set forth in Section 6(d)) determined by dividing the Stated Value of such share of Preferred Stock by the Conversion Price. Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as Annex A (a "Notice of Conversion"). Each Notice of Conversion shall specify the number of shares of Preferred Stock to be converted, the number of shares of Preferred Stock owned prior to the conversion at issue, the number of shares of Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers by facsimile such Notice of Conversion to the Corporation (such date, the "Conversion Date"). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue. Shares of Preferred Stock converted into Common Stock or redeemed in accordance with the terms hereof shall be canceled and shall not be reissued.

b) Conversion Price. The conversion price for the Preferred Stock shall equal [\$0.03]<sup>1</sup>, subject to adjustment herein, including but not limited to Section 10(b) (the "Conversion Price"); provided, however, in the event that during any period that Preferred Stock is outstanding, a Holder delivers a Notice of Conversion within 5 Trading Days following a period that the average of 5 consecutive VWAPs is less than \$0.02 (subject to adjustment for reverse and forward stock splits and the like) ("Trigger Period"), the Conversion Price shall be thereafter reduced, and only reduced, to equal the lesser of the then Conversion Price (as previously adjusted pursuant to this proviso) and 75% of the average of the lowest 5 consecutive VWAPs prior to the delivery of such Conversion Notice. Such adjustment may occur on multiple occasions during any Trigger Period and shall permanently reduce, and never increase, the Conversion Price.

c) Mechanics of Conversion

i. Delivery of Certificate Upon Conversion. Not later than three (3) Trading Days after each Conversion Date (the "Share Delivery Date"), the Corporation shall deliver, or cause to be delivered, to the converting Holder (A) a certificate or certificates representing the Conversion Shares which, on or after the six month anniversary of the Original Issue Date, shall be free of restrictive legends and trading restrictions (other than those which may then be required by the Purchase Agreement) representing the number of Conversion Shares being acquired upon the conversion of the Preferred Stock (including, if the Corporation has given continuous notice pursuant to Section 3(b) for payment of dividends in shares of Common Stock at least 20 Trading Days prior to the date on which the Notice of Conversion is delivered to the Corporation, shares of Common Stock representing the payment of accrued dividends otherwise determined pursuant to Section 3(a) but assuming that the Dividend Notice Period is the 20 Trading Days period immediately prior to the date on which the Notice of Conversion is delivered to the Corporation and excluding for such issuance the condition that the Corporation deliver the Dividend Share Amount as to such dividend payment prior to the commencement of the Dividend Notice Period), and (B) a bank check in the amount of accrued and unpaid dividends (if the Corporation has elected or is required to pay accrued dividends in cash). On or after the six month anniversary of the Original Issue Date, the Corporation shall use its best efforts to deliver any certificate or certificates required to be delivered by the Corporation under this Section 6 electronically through the Depository Trust Company or another established clearing corporation performing similar functions.

ii. Failure to Deliver Certificates. If, in the case of any Notice of Conversion, such certificate or certificates are not delivered to or as directed by the applicable Holder by the Share Delivery Date, the Holder shall be entitled to elect by written notice to the Corporation at any time on or before its receipt of such certificate or certificates, to rescind such Conversion, in which event the Corporation shall promptly return to the Holder any original Preferred Stock certificate delivered to the Corporation and the Holder shall promptly return to the Corporation the Common Stock certificates issued to such Holder pursuant to the rescinded Conversion Notice.

iii. Obligation Absolute; Partial Liquidated Damages. The Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder. In the event a Holder shall elect to convert any or all of the Stated Value of its Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or any one associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Preferred Stock of such Holder shall have been sought and obtained, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the Stated Value of Preferred Stock which is subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, the Corporation shall issue Conversion Shares and, if applicable, cash, upon a properly noticed conversion. If the Corporation fails to deliver to a Holder such certificate or certificates pursuant to Section 6(c)(i) on the second Trading Day after the Share Delivery Date applicable to such conversion, the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$5,000 of Stated Value of Preferred Stock being converted, \$50 per Trading Day (increasing to \$100 per Trading Day on the third Trading Day and increasing to \$200 per Trading Day on the sixth Trading Day after such damages begin to accrue) for each Trading Day after such second Trading Day after the Share Delivery Date until such certificates are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages or declare a Triggering Event pursuant to Section 10 hereof for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

iv. Compensation for Buy-In on Failure to Timely Deliver Certificates Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable certificate or certificates by the Share Delivery Date pursuant to Section 6(c)(i), and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount, if any, by which (x) such Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Preferred Stock equal to the number of shares of Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(c)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Preferred Stock with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver certificates representing shares of Common Stock upon conversion of the shares of Preferred Stock as required pursuant to the terms hereof.

v. Reservation of Shares Issuable Upon Conversion. The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Preferred Stock and payment of dividends on the Preferred Stock, each as herein provided, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other holders of the Preferred Stock), not less than such aggregate number of shares of the Common Stock as shall (subject to the terms and conditions set forth in the Purchase Agreement) be issuable (taking into account the adjustments and restrictions of Section 7) upon the conversion of the then outstanding shares of Preferred Stock and payment of dividends hereunder. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable.

vi. Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of the Preferred Stock. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such conversion, the Corporation shall at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Conversion Price or round up to the next whole share.

vii. Transfer Taxes and Expenses. The issuance of certificates for shares of the Common Stock on conversion of this Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such certificates, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such certificate upon conversion in a name other than that of the Holders of such shares of Preferred Stock and the Corporation shall not be required to issue or deliver such certificates unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid. The Corporation shall pay all Transfer Agent fees required for same-day processing of any Notice of Conversion.

d) Beneficial Ownership Limitation. The Corporation shall not effect any conversion of the Preferred Stock, and a Holder shall not have the right to convert any portion of the Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or any of such Holder's Affiliates) would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Stated Value of Preferred Stock beneficially owned by such Holder or any of its Affiliates and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by such Holder or any of its Affiliates. Except as set forth in the preceding sentence, for purposes of this Section 6(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this Section 6(d) applies, the determination of whether the Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates) and of how many shares of Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates) and how many shares of the Preferred Stock are convertible, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such Notice of Conversion has not violated the restrictions set forth in this paragraph and the Corporation shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 6(d), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Corporation's most recent periodic or annual report filed with the Commission, as the case may be, (ii) a more recent public announcement by the Corporation or (iii) a more recent written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Corporation shall within two Trading Days confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Preferred Stock, by such Holder or its Affiliates since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of Preferred Stock held by the applicable Holder. A Holder, upon not less than 61 days' prior notice to the Corporation, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 6(d) applicable to its Preferred Stock provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon conversion of this Preferred Stock held by the Holder and the provisions of this Section 6(d) shall continue to apply. Any such increase or decrease will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Corporation and shall only apply to such Holder and no other Holder. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6(d) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of Preferred Stock.

## Section 7. Certain Adjustments.

a) Stock Dividends and Stock Splits. If the Corporation, at any time while this Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of, or payment of a dividend on, this Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Equity Sales. If, at any time while this Preferred Stock is outstanding, the Corporation or any Subsidiary, as applicable sells or grants any option to purchase or sells or grants any right to repurchase, or otherwise disposes of or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or Common Stock Equivalents entitling any Person to acquire shares of Common Stock at an effective price per share that is lower than the then Conversion Price (such lower price, the "Base Conversion Price" and such issuances, collectively, a "Dilutive Issuance") (if the holder of the Common Stock or Common Stock Equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for less than the Conversion Price on such date of the Dilutive Issuance), then the Conversion Price shall be reduced to equal the Base Conversion Price. Such adjustment shall be made whenever such Common Stock or Common Stock Equivalents are issued. Notwithstanding the foregoing, no adjustment will be made under this Section 7(b) in respect of an Exempt Issuance. If the Corporation enters into a Variable Rate Transaction, despite the prohibition set forth in the Purchase Agreement, the Corporation shall be deemed to have issued Common Stock or Common Stock Equivalents at the lowest possible conversion price at which such securities may be converted or exercised. The Corporation shall notify the Holders in writing, no later than the Trading Day following the issuance of any Common Stock or Common Stock Equivalents subject to this Section 7(b), indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the "Dilutive Issuance Notice"). For purposes of clarification, whether or not the Corporation provides a Dilutive Issuance Notice pursuant to this Section 7(b), upon the occurrence of any Dilutive Issuance, the Holders are entitled to receive a number of Conversion Shares based upon the Base Conversion Price on or after the date of such Dilutive Issuance, regardless of whether a Holder accurately refers to the Base Conversion Price in the Notice of Conversion.

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of such Holder's Preferred Stock (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Pro Rata Distributions. During such time as this Preferred Stock is outstanding, if the Corporation declares or makes any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Preferred Stock, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete Conversion of this Preferred Stock (without regard to any limitations on Conversion hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

e) Fundamental Transaction. If, at any time while this Preferred Stock is outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person, (ii) the Corporation, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent conversion of this Preferred Stock, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock), the number of shares of Common Stock of the successor or acquiring corporation or of the Corporation, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Preferred Stock is convertible immediately prior to such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock). For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Corporation shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Preferred Stock following such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designation with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders' right to convert such preferred stock into Alternate Consideration. The Corporation shall cause any successor entity in a Fundamental Transaction in which the Corporation is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents (as defined in the Purchase Agreement) in accordance with the provisions of this Section 7(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the holder of this Preferred Stock, deliver to the Holder in exchange for this Preferred Stock a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Preferred Stock which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of this Preferred Stock (without regard to any limitations on the conversion of this Preferred Stock) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of this Preferred Stock immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designation and the other Transaction Documents referring to the "Corporation" shall refer instead to the Successor Entity), and may exercise every right and power of the Corporation and shall assume all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Corporation herein.



f) Calculations. All calculations under this Section 7 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 7, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

g) Notice to the Holders.

i. Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Conversion by Holder. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of this Preferred Stock, and shall cause to be delivered to each Holder at its last address as it shall appear upon the stock books of the Corporation, at least twenty (20) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Corporation or any of the Subsidiaries, the Corporation shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to convert the Conversion Amount of this Preferred Stock (or any part hereof) during the 20-day period commencing on the date of such notice through the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 8. [RESERVED]

Section 9. Negative Covenants. As long as any shares of Preferred Stock are outstanding, unless the holders of at least 67% in Stated Value of the then outstanding shares of Preferred Stock shall have otherwise given prior written consent, the Corporation shall not, and shall not permit any of the Subsidiaries to, directly or indirectly:

- a) amend its charter documents, including, without limitation, its certificate of incorporation and bylaws, in any manner that materially and adversely affects any rights of the Holder;
- b) repay, repurchase or offer to repay, repurchase or otherwise acquire more than a de minimis number of shares of its Common Stock, Common Stock Equivalents or Junior Securities, other than as to the Conversion Shares as permitted or required under the Transaction Documents;
- c) pay cash dividends or distributions on Junior Securities of the Corporation;
- d) enter into any transaction with any Affiliate of the Corporation which would be required to be disclosed in any public filing with the Commission, unless such transaction is made on an arm's-length basis and expressly approved by a majority of the disinterested directors of the Corporation (even if less than a quorum otherwise required for board approval); or
- e) enter into any agreement with respect to any of the foregoing.

Section 10. Redemption Upon Triggering Events.

- a) "Triggering Event" means, wherever used herein any of the following events (whatever the reason for such event and whether such event shall be voluntary or involuntary or effected by operation of law or pursuant to any judgment, decree or order of any court, or any order, rule or regulation of any administrative or governmental body):
    - i. the Corporation shall fail to deliver certificates representing Conversion Shares issuable upon a conversion hereunder that comply with the provisions hereof prior to the fifth Trading Day after such shares are required to be delivered hereunder, or the Corporation shall provide written notice to any Holder, including by way of public announcement, at any time, of its intention not to comply with requests for conversion of any shares of Preferred Stock in accordance with the terms hereof;
    - ii. the Corporation shall fail for any reason to pay in full the amount of cash due pursuant to a Buy-In within five calendar days after notice therefor is delivered hereunder;
    - iii. the Corporation shall fail to have available a sufficient number of authorized and unreserved shares of Common Stock to issue to such Holder upon a conversion hereunder;
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iv. unless specifically addressed elsewhere in this Certificate of Designation as a Triggering Event, the Corporation shall fail to observe or perform any other covenant, agreement or warranty contained in, or otherwise commit any breach of the Transaction Documents, and such failure or breach shall not, if subject to the possibility of a cure by the Corporation, have been cured within 30 calendar days after the date on which written notice of such failure or breach shall have been delivered;

v. the Corporation shall redeem more than a de minimis number of Junior Securities other than as to repurchases of Common Stock or Common Stock Equivalents from departing officers and directors, provided that, while any of the Preferred Stock remains outstanding, such repurchases shall not exceed an aggregate of \$100,000 from all officers and directors;

vi. the Corporation shall be party to a Change of Control Transaction;

vii. there shall have occurred a Bankruptcy Event;

viii. the Common Stock shall fail to be listed or quoted for trading on a Trading Market for more than five Trading Days, which need not be consecutive Trading Days or the transfer of shares of Common Stock through the Depository Trust Company System is no longer available or “chilled”; or

ix. any monetary judgment, writ or similar final process shall be entered or filed against the Corporation, any subsidiary or any of their respective property or other assets for more than \$100,000, and such judgment, writ or similar final process shall remain unvacated, unbonded or unstayed for a period of 45 calendar days.

b) Upon the occurrence of a Triggering Event, each Holder shall (in addition to all other rights it may have hereunder or under applicable law) have the right, exercisable at the sole option of such Holder, to require the Corporation to, (A) with respect to the Triggering Events set forth in Sections 10(a)(i), (ii), (iv), (v), (as to Changes of Control approved by the Board of Directors of the Corporation) and (vii) (as to voluntary filings only), redeem all of the Preferred Stock then held by such Holder for a redemption price, in cash, equal to the Triggering Redemption Amount or (B) at the option of each Holder, the Conversion Price shall thereafter be the lesser of (1) the then Conversion Price and (2) 60% of the average of the 3 VWAPs during the 20 Trading Day period immediately prior to the applicable Conversion Date. The Triggering Redemption Amount, in cash or in shares, shall be due and payable or issuable, as the case may be, within five Trading Days of the date on which the notice for the payment therefor is provided by a Holder (the “Triggering Redemption Payment Date”). If the Corporation fails to pay in full the Triggering Redemption Amount hereunder on the date such amount is due in accordance with this Section (whether in cash or shares of Common Stock), the Corporation will pay interest thereon at a rate equal to the lesser of 18% per annum or the maximum rate permitted by applicable law, accruing daily from such date until the Triggering Redemption Amount, plus all such interest thereon, is paid in full. For purposes of this Section, a share of Preferred Stock is outstanding until such date as the applicable Holder shall have received Conversion Shares upon a conversion (or attempted conversion) thereof that meets the requirements hereof or has been paid the Triggering Redemption Amount in cash.

Section 11. Miscellaneous.

a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service, addressed to the Corporation, at the address set forth above Attention: Gerald Commissiong, facsimile number (408) 852-4427, or such other facsimile number or address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section 11. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number or address of such Holder appearing on the books of the Corporation, or if no such facsimile number or address appears on the books of the Corporation, at the principal place of business of such Holder, as set forth in the Purchase Agreement. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

b) Absolute Obligation. Except as expressly provided herein, no provision of this Certificate of Designation shall alter or impair the obligation of the Corporation, which is absolute and unconditional, to pay liquidated damages, accrued dividends and accrued interest, as applicable, on the shares of Preferred Stock at the time, place, and rate, and in the coin or currency, herein prescribed.

c) Lost or Mutilated Preferred Stock Certificate. If a Holder's Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership hereof reasonably satisfactory to the Corporation.

d) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Certificate of Designation shall be governed by and construed and enforced in accordance with the internal laws of the State of Nevada, without regard to the principles of conflict of laws thereof. Each party agrees that all legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by any of the Transaction Documents (whether brought against a party hereto or its respective Affiliates, directors, officers, shareholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the "New York Courts"). Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such New York Courts, or such New York Courts are improper or inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Certificate of Designation and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by applicable law. Each party hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Certificate of Designation or the transactions contemplated hereby. If any party shall commence an action or proceeding to enforce any provisions of this Certificate of Designation, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

e) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Certificate of Designation shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Certificate of Designation or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Certificate of Designation on one or more occasions shall not be considered a waiver or deprive that party (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Certificate of Designation on any other occasion. Any waiver by the Corporation or a Holder must be in writing.

f) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

g) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

h) Headings. The headings contained herein are for convenience only, do not constitute a part of this Certificate of Designation and shall not be deemed to limit or affect any of the provisions hereof.

i) Status of Converted or Redeemed Preferred Stock. Shares of Preferred Stock may only be issued pursuant to the Purchase Agreement. If any shares of Preferred Stock shall be converted, redeemed or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series D 8% Convertible Preferred Stock.

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RESOLVED, FURTHER, that the Chairman, the president or any vice-president, and the secretary or any assistant secretary, of the Corporation be and they hereby are authorized and directed to prepare and file this Certificate of Designation of Preferences, Rights and Limitations in accordance with the foregoing resolution and the provisions of Nevada law.

IN WITNESS WHEREOF, the undersigned have executed this Certificate this \_\_\_\_ day of August 2013.

/s/ Gerald E. Commissiong

Name: Gerald E. Commissiong

Title: President and Chief Executive Officer

/s/ Marc E. Faerber

Name: Marc E. Faerber

Title: Chief Financial Officer and Secretary

ANNEX A

NOTICE OF CONVERSION

(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER TO CONVERT SHARES OF PREFERRED STOCK)

The undersigned hereby elects to convert the number of shares of Series D 8% Convertible Preferred Stock indicated below into shares of common stock, par value \$0.001 per share (the "Common Stock"), of Amaranthus BioScience Holdings, Inc., a Nevada corporation (the "Corporation"), according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a Person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as may be required by the Corporation in accordance with the Purchase Agreement. No fee will be charged to the Holders for any conversion, except for any such transfer taxes.

Conversion calculations:

Date to Effect Conversion: \_\_\_\_\_

Number of shares of Preferred Stock owned prior to Conversion: \_\_\_\_\_

Number of shares of Preferred Stock to be Converted: \_\_\_\_\_

Stated Value of shares of Preferred Stock to be Converted: \_\_\_\_\_

Number of shares of Common Stock to be Issued: \_\_\_\_\_

Applicable Conversion Price: \_\_\_\_\_

Number of shares of Preferred Stock subsequent to Conversion: \_\_\_\_\_

Address for Delivery: \_\_\_\_\_

or

DWAC Instructions:

Broker no: \_\_\_\_\_

Account no: \_\_\_\_\_

[HOLDER]

By: \_\_\_\_\_

Name:

Title:

1. Same conversion price as debenture conversion price.





## SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (this “Agreement”) is dated as of August \_\_, 2013, between Amarantus Bioscience Holdings, Inc., a Nevada corporation (the “Company”), and each purchaser identified on the signature pages hereto (each, including its successors and assigns, a “Purchaser” and collectively, the “Purchasers”).

WHEREAS, subject to the terms and conditions set forth in this Agreement and pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended (the “Securities Act”), and Rule 506 promulgated thereunder, the Company desires to issue and sell to each Purchaser, and each Purchaser, severally and not jointly, desires to purchase from the Company in consideration for the assumption of certain account payables, in one or more closings, securities of the Company as more fully described in this Agreement.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the Company and each Purchaser agree as follows:

### ARTICLE I. DEFINITIONS

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement: (a) capitalized terms that are not otherwise defined herein have the meanings given to such terms in the Certificate of Designation (as defined herein), and (b) the following terms have the meanings set forth in this Section 1.1:

“Acquiring Person” shall have the meaning ascribed to such term in Section 4.7.

“Action” shall have the meaning ascribed to such term in Section 3.1(j).

“Affiliate” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

“Board of Directors” means the board of directors of the Company.

“Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Certificate of Designation” means the Certificate of Designation to be filed prior to the first Closing by the Company with the Secretary of State of Nevada, in the form of Exhibit A attached hereto.

“Closing Dates” means the Trading Days on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto in connection with a Closing, and all conditions precedent to (i) the Purchasers’ obligations to pay the Subscription Amount as to such Closing and (ii) the Company’s obligations to deliver the Securities as to such Closing, in each case, have been satisfied or waived.

“Closing(s)” means the one or more closings of the purchase and sale of the Securities pursuant to Section 2.1.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the common stock of the Company, par value \$0.001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Company Counsel” means Sichenzia Ross Friedman Ference LLP, with offices located at 61 Broadway, 32<sup>nd</sup> Floor, New York NY 10006.

“Conversion Price” shall have the meaning ascribed to such term in the Certificate of Designation.

“Conversion Shares” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Preferred Stock.

“Disclosure Schedules” shall have the meaning ascribed to such term in Section 3.1.

“EGS” means Ellenoff Grossman & Schole LLP, with offices located at 150 East 42nd Street, New York, New York 10017.

“Evaluation Date” shall have the meaning ascribed to such term in Section 3.1(r).

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Exempt Issuance” means the issuance of (a) shares of Common Stock or options to employees, officers, directors or consultants of the Company pursuant to the Company’s existing stock option plans and any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose; provided, however, such issuances to consultants under this clause (a) shall not exceed five (5%) percent of the issued and outstanding shares of the Company in any 30 day period, (b) securities upon the exercise or exchange of or conversion of any Securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock, issued and outstanding on the date of this Agreement (including issuances pursuant to the Company’s 8% Original Issue Discount Senior Secured Convertible Debentures issued concurrently or shortly after the Original Issue Date or any warrants issuable in connection therewith), or pursuant to other agreements of the Company existing prior to the date hereof and listed on Schedule 3.1(g), provided that such securities and/or agreements have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities, and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

“FCPA” means the Foreign Corrupt Practices Act of 1977, as amended.

“FDA” shall have the meaning ascribed to such term in Section 3.1(kk).

“FDCA” shall have the meaning ascribed to such term in Section 3.1(kk).

“GAAP” shall have the meaning ascribed to such term in Section 3.1(h).

“Indebtedness” shall have the meaning ascribed to such term in Section 3.1(aa).

“Intellectual Property Rights” shall have the meaning ascribed to such term in Section 3.1(o).

“Legend Removal Date” shall have the meaning ascribed to such term in Section 4.1(c).

“Liens” means a lien, charge, pledge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“Material Adverse Effect” shall have the meaning assigned to such term in Section 3.1(b).

“Material Permits” shall have the meaning ascribed to such term in Section 3.1(m).

“Maximum Rate” shall have the meaning ascribed to such term in Section 5.17.

“Participation Maximum” shall have the meaning ascribed to such term in Section 4.12(a).

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Pharmaceutical Product” shall have the meaning ascribed to such term in Section 3.1(kk).

“Preferred Stock” means the up to 2,000 shares of the Company’s Series D 8% Convertible Preferred Stock issued hereunder having the rights, preferences and privileges set forth in the Certificate of Designation, in the form of Exhibit A hereto.

“Pre-Notice” shall have the meaning ascribed to such term in Section 4.12(b).

“Pro Rata Portion” shall have the meaning ascribed to such term in Section 4.12(e).

“Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“Public Information Failure” shall have the meaning ascribed to such term in Section 4.3(b).

“Public Information Failure Payments” shall have the meaning ascribed to such term in Section 4.3(b).

“Purchaser Party” shall have the meaning ascribed to such term in Section 4.10.

“Required Approvals” shall have the meaning ascribed to such term in Section 3.1(e).

“Required Minimum” means, as of any date, the maximum aggregate number of shares of Common Stock then issued or potentially issuable in the future pursuant to the Transaction Documents, including any Conversion Shares issuable upon conversion in full of all shares of Preferred Stock, ignoring any conversion limits set forth therein.

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“SEC Reports” shall have the meaning ascribed to such term in Section 3.1(h).

“Securities” means the Preferred Stock and the Conversion Shares.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Settlement Agreement” shall have the meaning ascribed to such term in Section 2.1.

“Short Sales” means all “short sales” as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include the location and/or reservation of borrowable shares of Common Stock).

“Stated Value” means \$1,000 per share of Preferred Stock.

“Subscription Amount” shall mean, as to each Purchaser, the aggregate amount to be paid for the Preferred Stock purchased hereunder as specified below such Purchaser’s name on Annex A under the heading “Subscription Amount,” which amount shall be equal to the aggregate amount of accounts payable subject to any Settlement Agreement delivered by such Purchaser as the applicable Closing, divided by 0.90.

“Subsequent Financing” shall have the meaning ascribed to such term in Section 4.12(a).

“Subsequent Financing Notice” shall have the meaning ascribed to such term in Section 4.12(b).

“Subsidiary” means any subsidiary of the Company as set forth on Schedule 3.1(a) and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

“Trading Day” means a day on which the principal Trading Market is open for trading.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE MKT, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange, the OTC Bulletin Board or the OTC Markets (or any successors to any of the foregoing).

“Transaction Documents” means this Agreement, the Certificate of Designation, the Transfer Agent Instruction Letter, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Transfer Agent” means VStock Transfer, LLC, the current transfer agent of the Company, with a mailing address of 77 Spruce Street, Suite 201, Cedarhurst, New York 11516 and a facsimile number of (646) 536-3179, and any successor transfer agent of the Company.

“Transfer Agent Instruction Letter” means the letter from the Company to the Transfer Agent which instructs the Transfer Agent to issue shares of Common Stock upon conversion of the Preferred Stock or upon the payment of dividends in shares of Common Stock, in the form of Exhibit C attached hereto.

“Variable Rate Transaction” shall have the meaning ascribed to such term in Section 4.13(b).

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if the OTC Bulletin Board is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the OTC Bulletin Board, (c) if the Common Stock is not then listed or quoted for trading on the OTC Bulletin Board and if prices for the Common Stock are then reported in the “Pink Sheets” published by Pink OTC Markets, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Purchasers of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

## ARTICLE II. PURCHASE AND SALE

2.1 Closings. From time to time after the date hereof, the Company’s special counsel will negotiate directly with the holders of the Company’s account payables (“A/P Holders”) for the purpose of entering into letter agreements with such account payables for the settlement of amounts owed by the Company (each, a “Settlement Agreement”). Upon receipt of one or more Settlement Agreements, the Company shall notify the Purchaser and provide a list of A/P holders and the related Settlement Agreements. After reviewing such list, the Purchaser shall notify the Company as to the Settlement Agreements it wishes to incorporate into this Agreement and the Company and each Purchaser, severally and not jointly, shall mutually agree to the timing and amount of a Closing and the schedule of payments pursuant to the Settlement Agreements acceptable to the Company and each Purchaser. The list of accepted Settlement Agreements (“Accepted Settlement Agreements”) shall be set forth on Annex A attached hereto, which shall be amended from time to time upon mutual consent of the parties. Annex A, as amended from time to time, shall be incorporated by reference into this Agreement. Until the Company and each Purchaser agree to a list of Accepted Settlement Agreements, neither party shall be bound hereunder to make any payment in respect of a Settlement Agreement or issue Preferred Stock unless and until such Settlement Agreement has become an Accepted Settlement Agreement. On each Closing Date, upon the terms and subject to the conditions set forth herein, in consideration for agreeing to pay to the A/P Holders the amounts set forth in the Accepted Settlement Agreements when due and payable, the Company agrees to sell, and the Purchasers, severally and not jointly, agree to purchase, a number of shares of Preferred Stock equal to, as to a Purchaser, the aggregate face amount of account payables subject to all Accepted Settlement Agreements, divided by 0.90. Upon satisfaction of the covenants and conditions set forth in Sections 2.2 and 2.3, each Closing shall occur at the offices of EGS or such other location as the parties shall mutually agree.

2.2 Deliveries.

(a) On or prior to each Closing Date (or as otherwise indicated below), the Company shall deliver or cause to be delivered to each Purchaser the following:

- (i) At the first Closing, this Agreement duly executed by the Company;
- (ii) a legal opinion of Company Counsel, substantially in the form of Exhibit B attached hereto; and
- (iii) the Transfer Agent Instruction Letter, duly executed by the Company and the Transfer Agent;
- (iv) the Accepted Settlement Agreements relating to such Purchaser's Subscription Amount as to such Closing; and
- (v) a certificate evidencing a number of shares of Preferred Stock equal to such Purchaser's Subscription Amount divided by \$1,000, registered in the name of such Purchaser and evidence of the filing and acceptance of the Certificate of Designation from the Secretary of State of Nevada.

(b) On or prior to each Closing Date, each Purchaser shall deliver or cause to be delivered to the Company, as applicable, the following:

- (i) At the first Closing, this Agreement duly executed by such Purchaser.

2.3 Closing Conditions.

(a) The obligations of the Company hereunder in connection with each Closing are subject to the following conditions being met:

(i) the accuracy in all material respects on the applicable Closing Date of the representations and warranties of the Purchasers contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);

(ii) all obligations, covenants and agreements of each Purchaser required to be performed at or prior to the applicable Closing Date shall have been performed; and

(iii) the delivery by each Purchaser of the items set forth in Section 2.2(b) of this Agreement.

(b) The respective obligations of the Purchasers hereunder in connection with each Closing are subject to the following conditions being met:

(i) the accuracy in all material respects when made and on the applicable Closing Date of the representations and warranties of the Company contained herein (unless as of a specific date therein);

(ii) all obligations, covenants and agreements of the Company required to be performed at or prior to the applicable Closing Date shall have been performed;

(iii) the delivery by the Company of the items set forth in Section 2.2(a) of this Agreement;

(iv) there shall have been no Material Adverse Effect with respect to the Company since the date hereof; and

(v) from the date hereof to the applicable Closing Date, trading in the Common Stock shall not have been suspended by the Commission or the Company's principal Trading Market and, at any time prior to the applicable Closing Date, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on any Trading Market, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change in, any financial market which, in each case, in the reasonable judgment of such Purchaser, makes it impracticable or inadvisable to purchase the Securities at the applicable Closing.



**ARTICLE III.**  
**REPRESENTATIONS AND WARRANTIES**

3.1 Representations and Warranties of the Company. Except as set forth in the Disclosure Schedules, which Disclosure Schedules shall be deemed a part hereof and shall qualify any representation or otherwise made herein to the extent of the disclosure contained in the corresponding section of the Disclosure Schedules, the Company hereby makes the following representations and warranties to each Purchaser:

(a) Subsidiaries. All of the direct and indirect subsidiaries of the Company are set forth on Schedule 3.1(a). The Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary free and clear of any Liens, and all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. If the Company has no subsidiaries, all other references to the Subsidiaries or any of them in the Transaction Documents shall be disregarded.

(b) Organization and Qualification. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation nor default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect") and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(c) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors or the Company's stockholders in connection herewith or therewith other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which it is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(d) No Conflicts. The execution, delivery and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not: (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than: (i) the filings required pursuant to Section 4.6 of this Agreement, (ii) the notice and/or application(s) to each applicable Trading Market for the issuance and sale of the Securities and the listing of the Conversion Shares for trading thereon in the time and manner required thereby, and (iii) the filing of Form D with the Commission and such filings as are required to be made under applicable state securities laws (collectively, the "Required Approvals").

(f) Issuance of the Securities. The Securities are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company other than restrictions on transfer provided for in the Transaction Documents. The Conversion Shares, when issued in accordance with the terms of the Transaction Documents, will be validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company other than restrictions on transfer provided for in the Transaction Documents. The Company has reserved from its duly authorized capital stock a number of shares of Common Stock for issuance of the Conversion Shares at least equal to 150% of the Required Minimum on the date hereof.

(g) Capitalization. The capitalization of the Company is as set forth on Schedule 3.1(g), which Schedule 3.1(g) shall also include the number of shares of Common Stock owned beneficially, and of record, by Affiliates of the Company as of the date hereof. Except as set forth on Schedule 3.1(g), the Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options under the Company's stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plans and pursuant to the conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents. Except as set forth on Schedule 3.1(g) and except as a result of the purchase and sale of the Securities, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire any shares of Common Stock, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents. The issuance and sale of the Securities will not obligate the Company to issue shares of Common Stock or other securities to any Person (other than the Purchasers) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under any of such securities. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. No further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company's capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company's stockholders.

(h) SEC Reports; Financial Statements. Except as set forth on Schedule 3.1(h), the Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "SEC Reports") on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company has ceased to be an issuer subject to Rule 144(i) under the Securities Act, one year has elapsed from the time the Company has filed current Form 10 information with the SEC and has filed all required annual and quarterly reports in the preceding 12 months period. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved ("GAAP"), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(i) Material Changes; Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the SEC Reports, except as specifically disclosed in a subsequent SEC Report filed prior to the date hereof: (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company stock option plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement or as set forth on Schedule 3.1(i), no event, liability, fact, circumstance, occurrence or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or its Subsidiaries or their respective businesses, properties, operations, assets or financial condition, that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least 1 Trading Day prior to the date that this representation is made.

(j) Litigation. Except as may be disclosed in the SEC Reports, there is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an "Action") which (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary, nor any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(k) Labor Relations. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company's or its Subsidiaries' employees is a member of a union that relates to such employee's relationship with the Company or such Subsidiary, and neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that their relationships with their employees are good. To the knowledge of the Company, no executive officer of the Company or any Subsidiary, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(l) Compliance. Neither the Company nor any Subsidiary: (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any judgment, decree or order of any court, arbitrator or other governmental authority or (iii) is or has been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case as could not have or reasonably be expected to result in a Material Adverse Effect.

(m) Regulatory Permits. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect (“Material Permits”), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Material Permit.

(n) Title to Assets. The Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and the Subsidiaries are in compliance.

(o) Intellectual Property. The Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights as described in the SEC Reports as necessary or required for use in connection with their respective businesses and which the failure to so have could have a Material Adverse Effect (collectively, the “Intellectual Property Rights”). None of, and neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of, the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years from the date of this Agreement. Neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Intellectual Property Rights violate or infringe upon the rights of any Person, except as could not have or reasonably be expected to not have a Material Adverse Effect. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(p) Insurance. Except as set forth on Schedule 3.1(p), the Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged, including, but not limited to, directors and officers insurance coverage at least equal to the aggregate Subscription Amount. Neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

(q) Transactions With Affiliates and Employees. Except as set forth in the SEC Reports, none of the officers or directors of the Company or any Subsidiary and, to the knowledge of the Company, none of the employees of the Company or any Subsidiary is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for: (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(r) Sarbanes-Oxley: Internal Accounting Controls. Except as may be disclosed in the SEC Reports, the Company and the Subsidiaries are in compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of each Closing Date. Except as disclosed in the SEC Reports, the Company and the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company and the Subsidiaries have established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and the Subsidiaries and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company and the Subsidiaries as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company and its Subsidiaries that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company and its Subsidiaries.

(s) Certain Fees. No brokerage or finder's fees or commissions are or will be payable by the Company or any Subsidiary to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(t) Private Placement. Assuming the accuracy of the Purchasers' representations and warranties set forth in Section 3.2, no registration under the Securities Act is required for the offer and sale of the Securities by the Company to the Purchasers as contemplated hereby. The issuance and sale of the Securities hereunder does not contravene the rules and regulations of the Trading Market.

(u) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities, will not be or be an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an "investment company" subject to registration under the Investment Company Act of 1940, as amended.

(v) Registration Rights. No Person has any right to cause the Company to effect the registration under the Securities Act of any securities of the Company or any Subsidiary.

(w) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. The Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. The Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements.

(x) [RESERVED]

(y) Disclosure. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Purchasers or their agents or counsel with any information that it believes constitutes or might constitute material, non-public information. The Company understands and confirms that the Purchasers will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Purchasers regarding the Company and its Subsidiaries, their respective businesses and the transactions contemplated hereby, including the Disclosure Schedules to this Agreement, is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The press releases disseminated by the Company during the twelve months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made and when made, not misleading. The Company acknowledges and agrees that no Purchaser makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.2 hereof.

(z) No Integrated Offering. Assuming the accuracy of the Purchasers' representations and warranties set forth in Section 3.2, neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of (i) the Securities Act which would require the registration of any such securities under the Securities Act, or (ii) any applicable shareholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(aa) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and its Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company or of any Subsidiary know of no basis for any such claim.



(bb) No General Solicitation. Neither the Company nor any person acting on behalf of the Company has offered or sold any of the Securities by any form of general solicitation or general advertising. The Company has offered the Securities for sale only to the Purchasers and certain other “accredited investors” within the meaning of Rule 501 under the Securities Act.

(cc) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has: (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law or (iv) violated in any material respect any provision of FCPA.

(dd) Accountants. The Company’s accounting firm is set forth on Schedule 3.1(ee) of the Disclosure Schedules. To the knowledge and belief of the Company, such accounting firm: (i) is a registered public accounting firm as required by the Exchange Act and (ii) shall express its opinion with respect to the financial statements to be included in the Company’s Annual Report for the fiscal year ending December 31, 2013.

(ee) Seniority. As of each Closing Date, no Indebtedness or other claim against the Company is senior to the Preferred Stock in right of payment, whether with respect to interest or upon liquidation or dissolution, or otherwise, other than indebtedness secured by purchase money security interests (which is senior only as to underlying assets covered thereby) and capital lease obligations (which is senior only as to the property covered thereby).

(ff) No Disagreements with Accountants and Lawyers. There are no disagreements of any kind presently existing, or reasonably anticipated by the Company to arise, between the Company and the accountants and lawyers formerly or presently employed by the Company and the Company is current with respect to any fees owed to its accountants and lawyers which could affect the Company’s ability to perform any of its obligations under any of the Transaction Documents.

(gg) Acknowledgment Regarding Purchasers’ Purchase of Securities. The Company acknowledges and agrees that each of the Purchasers is acting solely in the capacity of an arm’s length purchaser with respect to the Transaction Documents and the transactions contemplated thereby. The Company further acknowledges that no Purchaser is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated thereby and any advice given by any Purchaser or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchasers’ purchase of the Securities. The Company further represents to each Purchaser that the Company’s decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

(hh) Acknowledgment Regarding Purchaser's Trading Activity. Anything in this Agreement or elsewhere herein to the contrary notwithstanding (except for Sections 3.2(f) and 4.15 hereof), it is understood and acknowledged by the Company that: (i) none of the Purchasers has been asked by the Company to agree, nor has any Purchaser agreed, to desist from purchasing or selling, long and/or short, securities of the Company, or "derivative" securities based on securities issued by the Company or to hold the Securities for any specified term, (ii) past or future open market or other transactions by any Purchaser, specifically including, without limitation, Short Sales or "derivative" transactions, before or after a closing of this or future private placement transactions, may negatively impact the market price of the Company's publicly-traded securities, (iii) any Purchaser, and counter-parties in "derivative" transactions to which any such Purchaser is a party, directly or indirectly, may presently have a "short" position in the Common Stock and (iv) each Purchaser shall not be deemed to have any affiliation with or control over any arm's length counter-party in any "derivative" transaction. The Company further understands and acknowledges that (y) one or more Purchasers may engage in hedging activities at various times during the period that the Securities are outstanding, including, without limitation, during the periods that the value of the Conversion Shares deliverable with respect to Securities are being determined, and (z) such hedging activities (if any) could reduce the value of the existing stockholders' equity interests in the Company at and after the time that the hedging activities are being conducted. The Company acknowledges that such aforementioned hedging activities do not constitute a breach of any of the Transaction Documents.

(ii) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company, other than, in the case of clauses (ii) and (iii), compensation paid to the Company's placement agent in connection with the placement of the Securities.

(jj) FDA. As to each product subject to the jurisdiction of the U.S. Food and Drug Administration ("FDA") under the Federal Food, Drug and Cosmetic Act, as amended, and the regulations thereunder ("FDCA") that is manufactured, packaged, labeled, tested, distributed, sold, and/or marketed by the Company or any of its Subsidiaries (each such product, a "Pharmaceutical Product"), such Pharmaceutical Product is being manufactured, packaged, labeled, tested, distributed, sold and/or marketed by the Company in compliance with all applicable requirements under FDCA and similar laws, rules and regulations relating to registration, investigational use, premarket clearance, licensure, or application approval, good manufacturing practices, good laboratory practices, good clinical practices, product listing, quotas, labeling, advertising, record keeping and filing of reports, except where the failure to be in compliance would not have a Material Adverse Effect. There is no pending, completed or, to the Company's knowledge, threatened, action (including any lawsuit, arbitration, or legal or administrative or regulatory proceeding, charge, complaint, or investigation) against the Company or any of its Subsidiaries, and none of the Company or any of its Subsidiaries has received any notice, warning letter or other communication from the FDA or any other governmental entity, which (i) contests the premarket clearance, licensure, registration, or approval of, the uses of, the distribution of, the manufacturing or packaging of, the testing of, the sale of, or the labeling and promotion of any Pharmaceutical Product, (ii) withdraws its approval of, requests the recall, suspension, or seizure of, or withdraws or orders the withdrawal of advertising or sales promotional materials relating to, any Pharmaceutical Product, (iii) imposes a clinical hold on any clinical investigation by the Company or any of its Subsidiaries, (iv) enjoins production at any facility of the Company or any of its Subsidiaries, (v) enters or proposes to enter into a consent decree of permanent injunction with the Company or any of its Subsidiaries, or (vi) otherwise alleges any violation of any laws, rules or regulations by the Company or any of its Subsidiaries, and which, either individually or in the aggregate, would have a Material Adverse Effect. The properties, business and operations of the Company have been and are being conducted in all material respects in accordance with all applicable laws, rules and regulations of the FDA. The Company has not been informed by the FDA that the FDA will prohibit the marketing, sale, license or use in the United States of any product proposed to be developed, produced or marketed by the Company nor has the FDA expressed any concern as to approving or clearing for marketing any product being developed or proposed to be developed by the Company.

(kk) Stock Option Plans. Each stock option granted by the Company under the Company's stock option plan was granted (i) in accordance with the terms of the Company's stock option plan and (ii) with an exercise price at least equal to the fair market value of the Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company's stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no Company policy or practice to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(ll) Office of Foreign Assets Control. Neither the Company nor any Subsidiary nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC").

(mm) U.S. Real Property Holding Corporation. The Company is not and has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon Purchaser's request.

(nn) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries or Affiliates is subject to the Bank Holding Company Act of 1956, as amended (the “BHCA”) and to regulation by the Board of Governors of the Federal Reserve System (the “Federal Reserve”). Neither the Company nor any of its Subsidiaries or Affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or Affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(oo) Money Laundering. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the “Money Laundering Laws”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any Subsidiary with respect to the Money Laundering Laws is pending or, to the knowledge of the Company or any Subsidiary, threatened.

(pp) “Value of Account Payables” The Company acknowledges and agrees that the Purchasers will be engaging in direct negotiations with the A/P Holders for a settlement of payables and claims absent any participation of the Company and such negotiations and final terms of agreement will be at the sole discretion of the applicable Purchaser and A/P Holder, subject to the Company’s acceptance of the definitive Assumption and Release Agreement delivered at a closing. The amount a Purchaser may be required to pay in the final agreement could be materially less than the face amount of the applicable Account Payable. Such final agreement on terms of payment by a Purchaser to an A/P Holder shall have no bearing on the terms of the purchase of Preferred Stock, which shall be according to the face amount of the applicable account payable otherwise pursuant to the terms of this Agreement.

3.2 Representations and Warranties of the Purchasers. Each Purchaser, for itself and for no other Purchaser, hereby represents and warrants as of the date hereof and as of each Closing Date to the Company as follows (unless as of a specific date therein):

(a) Organization; Authority. Such Purchaser is either an individual or an entity duly incorporated or formed, validly existing and in good standing under the laws of the jurisdiction of its incorporation or formation with full right, corporate, partnership, limited liability company or similar power and authority to enter into and to consummate the transactions contemplated by the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of the Transaction Documents and performance by such Purchaser of the transactions contemplated by the Transaction Documents have been duly authorized by all necessary corporate, partnership, limited liability company or similar action, as applicable, on the part of such Purchaser. Each Transaction Document to which it is a party has been duly executed by such Purchaser, and when delivered by such Purchaser in accordance with the terms hereof, will constitute the valid and legally binding obligation of such Purchaser, enforceable against it in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors’ rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(b) Own Account. Such Purchaser understands that the Securities are “restricted securities” and have not been registered under the Securities Act or any applicable state securities law and is acquiring the Securities as principal for its own account and not with a view to or for distributing or reselling such Securities or any part thereof in violation of the Securities Act or any applicable state securities law, has no present intention of distributing any of such Securities in violation of the Securities Act or any applicable state securities law and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Securities in violation of the Securities Act or any applicable state securities law (this representation and warranty not limiting such Purchaser’s right to sell the Securities pursuant to the Registration Statement or otherwise in compliance with applicable federal and state securities laws). Such Purchaser is acquiring the Securities hereunder in the ordinary course of its business.

(c) Purchaser Status. At the time such Purchaser was offered the Securities, it was, and as of the date hereof it is, and on each date on which it converts any shares of Preferred Stock, it will be either: (i) an “accredited investor” as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Securities Act or (ii) a “qualified institutional buyer” as defined in Rule 144A(a) under the Securities Act.

(d) Experience of Such Purchaser. Such Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(e) General Solicitation. Such Purchaser is not purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or any other general solicitation or general advertisement.

The Company acknowledges and agrees that the representations contained in Section 3.2 shall not modify, amend or affect such Purchaser's right to rely on the Company's representations and warranties contained in this Agreement or any representations and warranties contained in any other Transaction Document or any other document or instrument executed and/or delivered in connection with this Agreement or the consummation of the transaction contemplated hereby.

**ARTICLE IV.  
OTHER AGREEMENTS OF THE PARTIES**

4.1 Transfer Restrictions.

(a) The Securities may only be disposed of in compliance with state and federal securities laws. In connection with any transfer of Securities other than pursuant to an effective registration statement or Rule 144, to the Company or to an Affiliate of a Purchaser or in connection with a pledge as contemplated in Section 4.1(b), the Company may require the transferor thereof to provide to the Company an opinion of counsel selected by the transferor and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Securities under the Securities Act. As a condition of transfer, any such transferee shall agree in writing to be bound by the terms of this Agreement and shall have the rights and obligations of a Purchaser under this Agreement.

(b) The Purchasers agree to the imprinting, so long as is required by this Section 4.1, of a legend on any of the Securities in the following form:

[NEITHER] THIS SECURITY [NOR THE SECURITIES INTO WHICH THIS SECURITY IS CONVERTIBLE] HAS [NOT] BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY. THIS SECURITY [AND THE SECURITIES ISSUABLE UPON CONVERSION OF THIS SECURITY] MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT WITH A REGISTERED BROKER-DEALER OR OTHER LOAN WITH A FINANCIAL INSTITUTION THAT IS AN “ACCREDITED INVESTOR” AS DEFINED IN RULE 501(a) UNDER THE SECURITIES ACT OR OTHER LOAN SECURED BY SUCH SECURITIES.

The Company acknowledges and agrees that a Purchaser may from time to time pledge pursuant to a bona fide margin agreement with a registered broker-dealer or grant a security interest in some or all of the Securities to a financial institution that is an “accredited investor” as defined in Rule 501(a) under the Securities Act and who agrees to be bound by the provisions of this Agreement and, if required under the terms of such arrangement, such Purchaser may transfer pledged or secured Securities to the pledgees or secured parties. Such a pledge or transfer would not be subject to approval of the Company and no legal opinion of legal counsel of the pledgee, secured party or pledgor shall be required in connection therewith. Further, no notice shall be required of such pledge. At the appropriate Purchaser’s expense, the Company will execute and deliver such reasonable documentation as a pledgee or secured party of Securities may reasonably request in connection with a pledge or transfer of the Securities, including, if the Securities are registered under a registration statement, the preparation and filing of any required prospectus supplement under Rule 424(b)(3) under the Securities Act or other applicable provision of the Securities Act to appropriately amend the list of selling stockholders thereunder.

(c) Certificates evidencing the Conversion Shares shall not contain any legend (including the legend set forth in Section 4.1(b) hereof): (i) while a registration statement covering the resale of such security is effective under the Securities Act, (ii) following any sale of such Conversion Shares pursuant to Rule 144, (iii) if such Conversion Shares are eligible for sale under Rule 144, without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such Conversion Shares and without volume or manner-of-sale restrictions or (iv) if such legend is not required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the Commission). The Company shall cause its counsel to issue a legal opinion to the Transfer Agent promptly after the events described in clauses (i)-(iv) in the immediately preceding sentence if required by the Transfer Agent to effect the removal of the legend hereunder. If all or any shares of Preferred Stock are converted at a time when there is an effective registration statement to cover the resale of the Conversion Shares, or if such Conversion Shares may be sold under Rule 144 and the Company is then in compliance with the current public information required under Rule 144, or if the Conversion Shares may be sold under Rule 144 without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such Conversion Shares and without volume or manner-of-sale restrictions or if such legend is not otherwise required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the Commission) then such Conversion Shares shall be issued free of all legends. The Company agrees that following such time as such legend is no longer required under this Section 4.1(c), it will, no later than three Trading Days following the delivery by a Purchaser to the Company or the Transfer Agent of a certificate representing Conversion Shares, as applicable, issued with a restrictive legend (such third Trading Day, the “Legend Removal Date”), deliver or cause to be delivered to such Purchaser a certificate representing such shares that is free from all restrictive and other legends. The Company may not make any notation on its records or give instructions to the Transfer Agent that enlarge the restrictions on transfer set forth in this Section 4. Certificates for Conversion Shares subject to legend removal hereunder shall be transmitted by the Transfer Agent to the Purchaser by crediting the account of the Purchaser’s prime broker with the Depository Trust Company System as directed by such Purchaser.

(d) In addition to such Purchaser's other available remedies, the Company shall pay to a Purchaser, in cash, as partial liquidated damages and not as a penalty, for each \$1,000 of Conversion Shares (based on the VWAP of the Common Stock on the date such Securities are submitted to the Transfer Agent) delivered for removal of the restrictive legend and subject to Section 4.1(c), \$10 per Trading Day (increasing to \$20 per Trading Day five (5) Trading Days after such damages have begun to accrue) for each Trading Day after the Legend Removal Date until such certificate is delivered without a legend. Nothing herein shall limit such Purchaser's right to pursue actual damages for the Company's failure to deliver certificates representing any Securities as required by the Transaction Documents, and such Purchaser shall have the right to pursue all remedies available to it at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief.

4.2 Acknowledgment of Dilution. The Company acknowledges that the issuance of the Securities may result in dilution of the outstanding shares of Common Stock, which dilution may be substantial under certain market conditions. The Company further acknowledges that its obligations under the Transaction Documents, including, without limitation, its obligation to issue the Conversion Shares pursuant to the Transaction Documents, are unconditional and absolute and not subject to any right of set off, counterclaim, delay or reduction, regardless of the effect of any such dilution or any claim the Company may have against any Purchaser and regardless of the dilutive effect that such issuance may have on the ownership of the other stockholders of the Company.



#### 4.3 Furnishing of Information; Public Information.

(a) The Company agrees to cause the Common Stock to be registered under Section 12(g) of the Exchange Act on or before the 60<sup>th</sup> calendar day following the date hereof. Thereafter, until the date on which no Purchaser owns Securities, the Company covenants to maintain the registration of the Common Stock under Section 12(b) or 12(g) of the Exchange Act and to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act even if the Company is not then subject to the reporting requirements of the Exchange Act.

(b) At any time during the period commencing from the six (6) month anniversary of the date hereof and ending at such time that all of the Securities may be sold without the requirement for the Company to be in compliance with Rule 144(c)(1) and otherwise without restriction or limitation pursuant to Rule 144, if the Company shall fail for any reason to satisfy the current public information requirement under Rule 144(c) (a “Public Information Failure”) then, in addition to such Purchaser’s other available remedies, the Company shall pay to a Purchaser, in cash, as partial liquidated damages and not as a penalty, by reason of any such delay in or reduction of its ability to sell the Securities, an amount in cash equal to two percent (2.0%) of the aggregate Subscription Amount of such Purchaser’s Securities on the day of a Public Information Failure and on every thirtieth (30<sup>th</sup>) day (pro rated for periods totaling less than thirty days) thereafter until the earlier of (a) the date such Public Information Failure is cured and (b) such time that such public information is no longer required for the Purchasers to transfer the Conversion Shares pursuant to Rule 144. The payments to which a Purchaser shall be entitled pursuant to this Section 4.3(b) are referred to herein as “Public Information Failure Payments.” Public Information Failure Payments shall be paid on the earlier of (i) the last day of the calendar month during which such Public Information Failure Payments are incurred and (ii) the third (3<sup>rd</sup>) Business Day after the event or failure giving rise to the Public Information Failure Payments is cured. In the event the Company fails to make Public Information Failure Payments in a timely manner, such Public Information Failure Payments shall bear interest at the rate of 1.5% per month (prorated for partial months) until paid in full. Nothing herein shall limit such Purchaser’s right to pursue actual damages for the Public Information Failure, and such Purchaser shall have the right to pursue all remedies available to it at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief.

4.4 Integration. The Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities in a manner that would require the registration under the Securities Act of the sale of the Securities or that would be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market such that it would require shareholder approval prior to the closing of such other transaction unless shareholder approval is obtained before the closing of such subsequent transaction.

4.5 Conversion Procedures. The form of Notice of Conversion included in the Certificate of Designation set forth the totality of the procedures required of the Purchasers in order to convert the Preferred Stock. Without limiting the preceding sentences, no ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required in order to convert the Preferred Stock. No additional legal opinion, other information or instructions shall be required of the Purchasers to convert their Preferred Stock. The Company shall honor conversions of the Preferred Stock and shall deliver Conversion Shares in accordance with the terms, conditions and time periods set forth in the Transaction Documents.

4.6 Securities Laws Disclosure; Publicity. The Company shall (a) by 9:30 a.m. (New York City time) on the Trading Day immediately following the date hereof, issue a press release disclosing the material terms of the transactions contemplated hereby, and (b) file a Current Report on Form 8-K, including the Transaction Documents as exhibits thereto, with the Commission within the time required by the Exchange Act. From and after the issuance of such press release, the Company represents to the Purchaser that it shall have publicly disclosed all material, non-public information delivered to any of the Purchasers by the Company or any of its Subsidiaries, or any of their respective officers, directors, employees or agents in connection with the transactions contemplated by the Transaction Documents. The Company and each Purchaser shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor any Purchaser shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any press release of any Purchaser, or without the prior consent of each Purchaser, with respect to any press release of the Company, which consent shall not unreasonably be withheld or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. Notwithstanding the foregoing, the Company shall not publicly disclose the name of any Purchaser, or include the name of any Purchaser in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of such Purchaser, except: (a) as required by federal securities law in connection with the filing of final Transaction Documents with the Commission and (b) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchasers with prior notice of such disclosure permitted under this clause (b).

4.7 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that any Purchaser is an "Acquiring Person" under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that any Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities under the Transaction Documents or under any other agreement between the Company and the Purchasers.

4.8 Non-Public Information. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company covenants and agrees that neither it, nor any other Person acting on its behalf, will provide any Purchaser or its agents or counsel with any information that the Company believes constitutes material non-public information, unless prior thereto such Purchaser shall have entered into a written agreement with the Company regarding the confidentiality and use of such information. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company.

4.9 Use of Proceeds. The Company shall receive no proceeds from this offering. The Purchasers are authorized to directly negotiate and pay the Company's accounts payables on negotiated terms between the Purchasers and the A/P Holders.

4.10 Indemnification of Purchasers. Subject to the provisions of this Section 4.10, the Company will indemnify and hold each Purchaser and its directors, officers, shareholders, members, partners, employees and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), each Person who controls such Purchaser (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, partners or employees (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a "Purchaser Party") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (a) any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or in the other Transaction Documents or (b) any action instituted against the Purchaser Parties in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company who is not an Affiliate of such Purchaser Party, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is based upon a breach of such Purchaser Party's representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Purchaser Party may have with any such stockholder or any violations by such Purchaser Party of state or federal securities laws or any conduct by such Purchaser Party which constitutes fraud, gross negligence, willful misconduct or malfeasance). If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Purchaser Party. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Company and the position of such Purchaser Party, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Purchaser Party under this Agreement (y) for any settlement by a Purchaser Party effected without the Company's prior written consent, which shall not be unreasonably withheld or delayed; or (z) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Purchaser Party's breach of any of the representations, warranties, covenants or agreements made by such Purchaser Party in this Agreement or in the other Transaction Documents. The indemnification required by this Section 4.10 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or are incurred. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Purchaser Party against the Company or others and any liabilities the Company may be subject to pursuant to law.

#### 4.11 Reservation and Listing of Securities.

(a) The Company shall maintain a reserve from its duly authorized shares of Common Stock for issuance pursuant to the Transaction Documents in such amount as equals 150% of the Required Minimum.

(b) If, on any date, the number of authorized but unissued (and otherwise unreserved) shares of Common Stock is less than 150% of (i) the Required Minimum on such date, minus (ii) the number of shares of Common Stock previously issued pursuant to the Transaction Documents, then the Board of Directors shall use commercially reasonable efforts to amend the Company's certificate or articles of incorporation to increase the number of authorized but unissued shares of Common Stock to at least the Required Minimum at such time (minus the number of shares of Common Stock previously issued pursuant to the Transaction Documents), as soon as possible and in any event not later than the 90<sup>th</sup> day after such date, provided that the Company will not be required at any time to authorize a number of shares of Common Stock greater than the maximum remaining number of shares of Common Stock that could possibly be issued after such time pursuant to the Transaction Documents.

(c) The Company shall, if applicable: (i) in the time and manner required by the principal Trading Market, prepare and file with such Trading Market an additional shares listing application covering a number of shares of Common Stock at least equal to the Required Minimum on the date of such application, (ii) take all steps necessary to cause such shares of Common Stock to be approved for listing or quotation on such Trading Market as soon as possible thereafter, (iii) provide to the Purchasers evidence of such listing or quotation and (iv) maintain the listing or quotation of such Common Stock on any date at least equal to the Required Minimum on such date on such Trading Market or another Trading Market.

#### 4.12 Participation in Future Financing.

(a) From the date hereof until the date that is the 12 month anniversary of the last Closing Date, upon any issuance by the Company or any of its Subsidiaries of Common Stock, Common Stock Equivalents for cash consideration, Indebtedness or a combination of units thereof (a "Subsequent Financing"), each Purchaser shall have the right to participate in up to an amount of the Subsequent Financing equal to 100% of the Subsequent Financing (the "Participation Maximum") on the same terms, conditions and price provided for in the Subsequent Financing.

(b) At least two (2) Trading Days prior to the closing of the Subsequent Financing, the Company shall deliver to each Purchaser a written notice of its intention to effect a Subsequent Financing (“Pre-Notice”), which Pre-Notice shall ask such Purchaser if it wants to review the details of such financing (such additional notice, a “Subsequent Financing Notice”). Upon the request of a Purchaser, and only upon a request by such Purchaser, for a Subsequent Financing Notice, the Company shall promptly, but no later than one (1) Trading Day after such request, deliver a Subsequent Financing Notice to such Purchaser. The Subsequent Financing Notice shall describe in reasonable detail the proposed terms of such Subsequent Financing, the amount of proceeds intended to be raised thereunder and the Person or Persons through or with whom such Subsequent Financing is proposed to be effected and shall include a term sheet or similar document relating thereto as an attachment.

(c) Any Purchaser desiring to participate in such Subsequent Financing must provide written notice to the Company by not later than 5:30 p.m. (New York City time) on the second (2<sup>nd</sup>) Trading Day after all of the Purchasers have received the Pre-Notice that such Purchaser is willing to participate in the Subsequent Financing, the amount of such Purchaser’s participation, and representing and warranting that such Purchaser has such funds ready, willing, and available for investment on the terms set forth in the Subsequent Financing Notice. If the Company receives no such notice from a Purchaser as of such second (2<sup>nd</sup>) Trading Day, such Purchaser shall be deemed to have notified the Company that it does not elect to participate.

(d) If by 5:30 p.m. (New York City time) on the second (2<sup>nd</sup>) Trading Day after all of the Purchasers have received the Pre-Notice, notifications by the Purchasers of their willingness to participate in the Subsequent Financing (or to cause their designees to participate) is, in the aggregate, less than the total amount of the Subsequent Financing, then the Company may effect the remaining portion of such Subsequent Financing on the terms and with the Persons set forth in the Subsequent Financing Notice.

(e) If by 5:30 p.m. (New York City time) on the second (2<sup>nd</sup>) Trading Day after all of the Purchasers have received the Pre-Notice, the Company receives responses to a Subsequent Financing Notice from Purchasers seeking to purchase more than the aggregate amount of the Participation Maximum, each such Purchaser shall have the right to purchase its Pro Rata Portion (as defined below) of the Participation Maximum. “Pro Rata Portion” means the ratio of (x) the Subscription Amount of Securities purchased by a Purchaser participating under this Section 4.12 and (y) the sum of the aggregate Subscription Amounts of Securities purchased by all Purchasers participating under this Section 4.12.

(f) The Company must provide the Purchasers with a second Subsequent Financing Notice, and the Purchasers will again have the right of participation set forth above in this Section 4.12, if the Subsequent Financing subject to the initial Subsequent Financing Notice is not consummated for any reason on the terms set forth in such Subsequent Financing Notice within thirty (30) Trading Days after the date of the initial Subsequent Financing Notice.

(g) The Company and each Purchaser agree that if any Purchaser elects to participate in the Subsequent Financing, the transaction documents related to the Subsequent Financing shall not include any term or provision whereby such Purchaser shall be required to agree to any restrictions on trading as to any of the Securities purchased hereunder or be required to consent to any amendment to or termination of, or grant any waiver, release or the like under or in connection with, this Agreement, without the prior written consent of such Purchaser.

(h) Notwithstanding anything to the contrary in this Section 4.12 and unless otherwise agreed to by such Purchaser, the Company shall either confirm in writing to such Purchaser that the transaction with respect to the Subsequent Financing has been abandoned or shall publicly disclose its intention to issue the securities in the Subsequent Financing, in either case in such a manner such that such Purchaser will not be in possession of any material, non-public information, by the tenth (10th) Business Day following delivery of the Subsequent Financing Notice. If by such tenth (10th) Business Day, no public disclosure regarding a transaction with respect to the Subsequent Financing has been made, and no notice regarding the abandonment of such transaction has been received by such Purchaser, such transaction shall be deemed to have been abandoned and such Purchaser shall not be deemed to be in possession of any material, non-public information with respect to the Company or any of its Subsidiaries.

(i) Notwithstanding the foregoing, this Section 4.12 shall not apply in respect of an Exempt Issuance.

#### 4.13 [INTENTIONALLY DELETED]

4.14 Equal Treatment of Purchasers. No consideration (including any modification of any Transaction Document) shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of this Agreement unless the same consideration is also offered to all of the parties to this Agreement. For clarification purposes, this provision constitutes a separate right granted to each Purchaser by the Company and negotiated separately by each Purchaser, and is intended for the Company to treat the Purchasers as a class and shall not in any way be construed as the Purchasers acting in concert or as a group with respect to the purchase, disposition or voting of Securities or otherwise.

4.15 Certain Transactions and Confidentiality. Each Purchaser, severally and not jointly with the other Purchasers, covenants that neither it, nor any Affiliate acting on its behalf or pursuant to any understanding with it will (i) execute any Short Sales, of any of the Company's securities during the period commencing with the execution of this Agreement and ending at such time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.6 or (ii) from the date hereof until the earlier of the 12 month anniversary of the date hereof and the date that the Preferred Stock is no longer outstanding, execute any Short Sales of the Common Stock (provided that this provision shall not prohibit any sales made where a corresponding Notice of Conversion or Notice of Exercise is tendered to the Company and the shares received upon such conversion or exercise are used to close out such sale) (a "Prohibited Short Sale"). Each Purchaser, severally and not jointly with the other Purchasers, covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company pursuant to the initial press release as described in Section 4.6, such Purchaser will maintain the confidentiality of the existence and terms of this transaction and the information included in the Transaction Documents and the Disclosure Schedules. Notwithstanding the foregoing, and notwithstanding anything contained in this Agreement to the contrary, the Company expressly acknowledges and agrees that (i) no Purchaser makes any representation, warranty or covenant hereby that it will not engage in effecting transactions in any securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.6, (ii) except for a Prohibited Short Sale, no Purchaser shall be restricted or prohibited from effecting any transactions in any securities of the Company in accordance with applicable securities laws from and after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.6 and (iii) no Purchaser shall have any duty of confidentiality to the Company or its Subsidiaries after the issuance of the initial press release as described in Section 4.6. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the covenant set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement.

4.16 Form D: Blue Sky Filings. The Company agrees to timely file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof, promptly upon request of any Purchaser. The Company shall take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for, or to qualify the Securities for, sale to the Purchasers under applicable securities or "Blue Sky" laws of the states of the United States, and shall provide evidence of such actions promptly upon request of any Purchaser.

4.17 Capital Changes. Until the 12 month anniversary of the last Closing Date, the Company shall not undertake a reverse or forward stock split or reclassification of the Common Stock without the prior written consent of the Purchasers holding a majority in interest of the shares of Preferred Stock.

4.18 Agreement to Satisfy Accepted Settlement Agreements. Subject to the terms and conditions hereunder, each Purchaser, severally and not jointly with the other Purchaser, covenants and agrees to pay directly to the A/P Holders their Pro Rata Portion of the amounts set forth in each Accepted Settlement Agreement when due and payable pursuant to the terms of the accepted Settlement Agreements (each, a "Settlement Payment"). The Accepted Settlement Agreements may not be amended without the prior written consent of the Purchasers. Notwithstanding anything herein to the contrary, each Purchaser's obligations to pay the A/P Holders is conditional upon, at each time a payment is due and payable under an Accepted Settlement Agreement, (i) the Company continuing to meet its obligations under this Agreement, including the accuracy and completeness of each representation, warranty and covenant under this Agreement, (iii) the absence at such time of a Material Adverse Effect on the Company or (iv) there shall not have occurred any Triggering Event (as defined in the Certificate of Designation). In the event that any of the above conditions are not met after the date hereof, each Purchaser shall have the right, in its sole determination, to terminate its obligations to make any future Settlement Payments hereunder and upon such termination, shall put back to the Company a proportional number of shares of Preferred Stock (based on the Settlement Payments made to date as compared to the unsatisfied Settlement Payments terminated hereunder in respect of the Preferred Stock issued in connection with the applicable Accepted Settlement Agreements).

**ARTICLE V.  
MISCELLANEOUS**

5.1 Termination. This Agreement may be terminated by any Purchaser, as to such Purchaser's obligations hereunder only and without any effect whatsoever on the obligations between the Company and the other Purchasers, by written notice to the other parties, if the first Closing has not been consummated on or before August \_\_\_\_, 2013; provided, however, that such termination will not affect the right of any party to sue for any breach by any other party (or parties).

5.2 Fees and Expenses. At each Closing, the Company has agreed to reimburse Dominion Capital, LLC ("Dominion") for its legal fees and expenses incurred in connection with each such Closing; provided however, such small amount shall not exceed \$20,000. Except as expressly set forth in the Transaction Documents to the contrary, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company and any conversion notice delivered by a Purchaser), stamp taxes and other taxes and duties levied in connection with the delivery of any Securities to the Purchasers.

5.3 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

5.4 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2<sup>nd</sup>) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto.



5.5 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and the Purchasers holding at least 67% in interest of the Securities then outstanding or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

5.6 Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

5.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of each Purchaser (other than by merger). Any Purchaser may assign any or all of its rights under this Agreement to any Person to whom such Purchaser assigns or transfers any Securities, provided that such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions of the Transaction Documents that apply to the "Purchasers."

5.8 No Third-Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 4.10 and this Section 5.8.

5.9 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company under Section 4.10, the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

5.10 Survival. The representations and warranties contained herein shall survive each Closing and the delivery of the Securities.

5.11 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or “.pdf” signature page were an original thereof.

5.12 Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

5.13 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) any of the other Transaction Documents, whenever any Purchaser exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Purchaser may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights; provided, however, that in the case of a rescission of a conversion of the Preferred Stock, the applicable Purchaser shall be required to return any shares of Common Stock subject to any such rescinded conversion notice concurrently with the restoration of such Purchaser’s right to acquire such shares pursuant to such Purchaser’s Preferred Stock.

5.14 Replacement of Securities. If any certificate or instrument evidencing any Securities is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof (in the case of mutilation), or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction. The applicant for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs (including customary indemnity) associated with the issuance of such replacement Securities.

5.15 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of the Purchasers and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any action for specific performance of any such obligation the defense that a remedy at law would be adequate.

5.16 Payment Set Aside. To the extent that the Company makes a payment or payments to any Purchaser pursuant to any Transaction Document or a Purchaser enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

5.17 Usury. To the extent it may lawfully do so, the Company hereby agrees not to insist upon or plead or in any manner whatsoever claim, and will resist any and all efforts to be compelled to take the benefit or advantage of, usury laws wherever enacted, now or at any time hereafter in force, in connection with any claim, action or proceeding that may be brought by any Purchaser in order to enforce any right or remedy under any Transaction Document. Notwithstanding any provision to the contrary contained in any Transaction Document, it is expressly agreed and provided that the total liability of the Company under the Transaction Documents for payments in the nature of interest shall not exceed the maximum lawful rate authorized under applicable law (the "Maximum Rate"), and, without limiting the foregoing, in no event shall any rate of interest or default interest, or both of them, when aggregated with any other sums in the nature of interest that the Company may be obligated to pay under the Transaction Documents exceed such Maximum Rate. It is agreed that if the maximum contract rate of interest allowed by law and applicable to the Transaction Documents is increased or decreased by statute or any official governmental action subsequent to the date hereof, the new maximum contract rate of interest allowed by law will be the Maximum Rate applicable to the Transaction Documents from the effective date thereof forward, unless such application is precluded by applicable law. If under any circumstances whatsoever, interest in excess of the Maximum Rate is paid by the Company to any Purchaser with respect to indebtedness evidenced by the Transaction Documents, such excess shall be applied by such Purchaser to the unpaid principal balance of any such indebtedness or be refunded to the Company, the manner of handling such excess to be at such Purchaser's election.

5.18 Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under any Transaction Document are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance or non-performance of the obligations of any other Purchaser under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Purchaser pursuant hereto or thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Purchaser shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Purchaser to be joined as an additional party in any proceeding for such purpose. Each Purchaser has been represented by its own separate legal counsel in its review and negotiation of the Transaction Documents. For reasons of administrative convenience only, each Purchaser and its respective counsel have chosen to communicate with the Company through EGS. EGS does not represent any of the Purchasers and only represents Dominion. The Company has elected to provide all Purchasers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by any of the Purchasers.

5.19 Liquidated Damages. The Company's obligations to pay any partial liquidated damages or other amounts owing under the Transaction Documents is a continuing obligation of the Company and shall not terminate until all unpaid partial liquidated damages and other amounts have been paid notwithstanding the fact that the instrument or security pursuant to which such partial liquidated damages or other amounts are due and payable shall have been canceled.

5.20 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

5.21 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and shares of Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

**5.22 WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.**

*(Signature Pages Follow)*

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**

Address for Notice:

675 Almanor Ave  
Sunnyvale, CA 94085  
Attn: Geraf Commissiong  
Fax: (408) 852-4427

By: \_\_\_\_\_

Name:

Title:

Fax:

With a copy to (which shall not constitute notice):

Sichenzia Ross Friedman Ference LLP  
61 Broadway, 32<sup>nd</sup> Floor  
New York, NY 10006  
Attn: Jeffrey Fessler, Esq.  
Fax: (212) 930-9725

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK  
SIGNATURE PAGE FOR PURCHASER FOLLOWS]

[PURCHASER SIGNATURE PAGES TO AMBS SECURITIES PURCHASE AGREEMENT]

IN WITNESS WHEREOF, the undersigned have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Purchaser: \_\_\_\_\_

*Signature of Authorized Signatory of Purchaser:* \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

Email Address of Authorized Signatory: \_\_\_\_\_

Facsimile Number of Authorized Signatory: \_\_\_\_\_

Address for Notice to Purchaser:

Address for Delivery of Securities to Purchaser (if not same as address for notice):

Subscription Amount: \$ \_\_\_\_\_

Shares of Preferred Stock: \_\_\_\_\_

EIN Number: \_\_\_\_\_

[SIGNATURE PAGES CONTINUE]

Annex A

**Accepted Settlement Agreements**

Date of Closing Payee Purchaser Subscription Amount (Face Amount of Payable/.9)

Schedule of Payments pursuant to Accepted Settlement Agreements

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## CERTIFICATIONS

I, Gerald E. Commissiong, certify that;

1. I have reviewed this quarterly report on Form 10-Q for the quarter ended June 30, 2013 of Amaranthus Bioscience Holdings, Inc. (the “registrant”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: August 19, 2013

/s/ Gerald E. Commissiong

By: Gerald E. Commissiong

Title: Chief Executive Officer

## CERTIFICATIONS

I, Marc Faerber, certify that;

1. I have reviewed this quarterly report on Form 10-Q for the quarter ended June 30, 2013 of Amaranthus Bioscience Holdings, Inc. (the “registrant”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: August 19, 2013

/s/ Marc Faerber

By: Marc Faerber

Title: Chief Financial Officer

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

In connection with the Quarterly Report of Amaranthus BioScience Holdings, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gerald E. Commissiong, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 19, 2013

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

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

In connection with the Quarterly Report of Amaranthus BioScience Holdings, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Marc E. Faerber, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 19, 2013

By: /s/ Marc E. Faerber  
Marc E. Faerber  
Chief Financial Officer (Principal Financial  
and Accounting Officer)