

Amarantus Bioscience Holdings, Inc.

Form 10-K

April 17, 2013

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2012

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE EXCHANGE ACT

For the transition period from _____ to _____

333-148922

(Commission file number)

Amarantus BioScience Holdings, Inc.

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of incorporation or organization)

26-0690857

(IRS Employer Identification No.)

675 Almanor Ave

Sunnydale, CA

(408) 737-2734

(Address and telephone number of principal executive offices)

Amarantus Bioscience, Inc..

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

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act.

Yes No

Indicate by check mark whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 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 during the preceding 12 months (or such shorter period that the registrant was required to submit and post such files. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in the definitive proxy or information statement incorporated by reference in Part III of this Form 10-K or amendment to Form 10-K. Yes No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a 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

The aggregate market value of the voting and non-voting common equity held by non-affiliates as of June 30, 2012, was \$1,184,900

As of April 12, 2013, there were 384,003,149 shares of common stock outstanding.

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AMARANTUS BIOSCIENCE HOLDINGS, INC.

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PART I

Forward-Looking Statements

This Annual Report on Form 10-K (including the section regarding Management's Discussion and Analysis or Plan of Operation) contains forward-looking statements regarding our business, financial condition, results of operations and prospects. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and similar expressions or variations of such words are intended to identify forward-looking statements, but are not deemed to represent an all-inclusive means of identifying forward-looking statements as denoted in this Annual Report on Form 10-K. Additionally, statements concerning future matters are forward-looking statements.

Although forward-looking statements in this Annual Report on Form 10-K reflect the good faith judgment of our Management, such statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties and actual results and outcomes may differ materially from the results and outcomes discussed in or anticipated by the forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include, without limitation, those specifically addressed under the heading "Risks Factors" below, as well as those discussed elsewhere in this Annual Report on Form 10-K. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K. We file reports with the Securities and Exchange Commission ("SEC"). Our electronic filings with the United States Securities and Exchange Commission (including our Annual Reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and any amendments to these reports) are available free of charge on the Securities and Exchange Commission's website at <http://www.sec.gov>. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

We undertake no obligation to revise or update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of this Annual Report on Form 10-K, except as required by law. Readers are urged to carefully review and consider the various disclosures made throughout the entirety of this Annual Report, which are designed to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.

Item 1. Description of Business

Company Overview

Amarantus Bioscience Holdings, Inc., a Nevada corporation (formerly Amaranthus Bioscience, Inc., Amaranthus Biosciences, Inc. and Jumpkicks, Inc., a Delaware corporation) (the “Company” or “Amarantus”), was founded in January 2008 and operates as a California-based development-stage biotechnology company. On May 25, 2011, the Company entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Amaranthus Therapeutics, Inc., a privately held Delaware corporation (“Amarantus”), and JKIK Acquisition Corp. (the “Acquisition Sub”), the Company’s former wholly-owned Delaware subsidiary. In connection with the closing of the merger transaction, Amaranthus merged with and into the Acquisition Sub on May 25, 2011 (the “Merger”).

On March 22, 2013, Amaranthus Bioscience, Inc., a Delaware corporation (“Amarantus Delaware”), filed with the Secretary of State of the State of Nevada Articles of Merger, pursuant to which Amaranthus Delaware merged with and into the Company, a Nevada corporation, and former wholly-owned subsidiary of Amaranthus Delaware (formed solely for the purpose of reincorporating in the State of Nevada). The Articles of Merger were filed pursuant to that certain Agreement and Plan of Merger, dated March 22, 2013, by and between Amaranthus Delaware and the Company (the “Merger Agreement”). Pursuant to the terms of the Merger Agreement and the Articles of Merger, the Company became the surviving corporation and Amaranthus Delaware ceased to exist.

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On April 5, 2013, the Company (formerly known as Amaranthus Bioscience, Inc.) filed a Certificate of Amendment to its Articles of Incorporation with the Secretary of State of Nevada, pursuant to which the Company's name was changed from Amaranthus Bioscience, Inc. to Amaranthus Bioscience Holdings, Inc.

The Company focuses on developing intellectual property and proprietary technology in order to develop drug candidates and diagnostic blood tests to diagnose and treat human diseases. The Company owns the intellectual property rights to a therapeutic protein known as Mesencephalic-Astrocyte-derived Neurotrophic Factor ("MANF"), owns the intellectual property rights to a number of biomarkers related to oncology and neurodegeneration named BC-SeraPro and NuroPro respectively, has a license to an Alzheimer's disease blood test named LymPro, and owns a number of proprietary cell lines called "PhenoGuard".

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. The Company's lead MANF product development effort is centered on a therapy for Parkinson's disease.

LymPro is a blood test that allows for the diagnosis of Alzheimer's disease, even in its earliest stages, based upon certain immunology based markers in the blood..BC-SeraPro is a blood test that allows for the detection of breast cancer in its earliest stages. NuroPro is a blood test that allows for the detection of neurodegenerative diseases, including Parkinson's, Alzheimer's and ALS in their earliest stages.

The Company also owns an inventory of 88 cell lines that Amaranthus refers to as PhenoGuard Cell Lines. MANF was the first therapeutic protein discovered from a PhenoGuard Cell Line. The Company believes that it may identify additional therapeutic proteins from its inventory of PhenoGuard Cell Lines, and can use these cell lines to screen for activity of other drug candidates. As part of the PhenoGuard process, the Company also has the ability to run certain very specific assays related to central nervous system disorders that could aid in the drug discovery process.

Recent Developments

On October 17, 2012, the Company was awarded a Translational Research Grant award from the University of Massachusetts' Pioneer Valley Life Sciences Institute's Center of Excellence in Apoptosis Research (CEAR). With the award of the Grant, Amaranthus agreed to collaborate with the University of Massachusetts to conduct a study to exploit publicly available genomics databases to identify potentially new therapeutic targets for Mesencephalic Astrocyte derived Neurotrophic Factor, or MANF-based therapeutics, and then validate those hypotheses in cell-based laboratory research, which could lead to the identification and patenting of therapeutic indications for MANF beyond what has already been reported. MANF is a protein that corrects protein misfolding, one of the major causes of apoptosis, or cell death.

The collaborative agreement between Amaranthus and the University of Massachusetts requires the University of Massachusetts to contribute \$27,900 to the Study and Amaranthus to contribute financial and in-kind support up to \$61,000. Any invention made solely by Amaranthus from the Study will belong to Amaranthus. Any invention made solely by one or more employees of the University of Massachusetts will belong to the University. Any invention made jointly will be jointly owned by Amaranthus and the University of Massachusetts. Should the University of Massachusetts obtain a patent on an invention it created from the Study, Amaranthus has licensing rights under the terms of the Agreement between Amaranthus and the University.

The collaborative agreement provides for cancellation by either party for a material breach of the agreement incurred for thirty (30) days after notice of a breach. The University of Massachusetts may also cancel the agreement immediately upon notice to Amaranthus of termination of the Grant.

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On December 14, 2012, the Company entered into an exclusive license agreement (the “License Agreement”) with Memory Dx, LLC (“MDx”) under which MDx granted to the Company an exclusive worldwide license to develop, manufacture, market, sell and import medical devices under MDx’s intellectual property pertaining to Alzheimer’s disease diagnosis (the “License”).

As consideration for the License, the Company will issue 2,000,000 shares of its common stock to MDx and will pay MDx a royalty equal to 9% of the net proceeds of all sales resulting from the License. Further, MDx, with the Company’s engagement, is to complete a validation study regarding a blood test for the detection of Alzheimer’s disease. To prepare the laboratory for this study, the Company is to pay to MDx \$15,000 initially upon execution of the License Agreement, \$15,000 in 30 days following the execution of the License Agreement, and \$20,000 in 60 days following the execution of the License Agreement. The Company will also assist MDx in fund raising, and, upon successful completion of the validation study, pay MDx \$1,000,000 in cash or Company stock. The Company may sell, sub-license or assign the License Agreement and has an option to terminate the License Agreement upon 30 days written notice if MDx is unable to meet its obligations regarding the validation study.

On December 19, 2012, the Company entered into a bill of sale (the “Bill of Sale”) with Lowell T. Cage, the chapter 7 trustee for Power3 Medical Products, Inc. (“Seller”) pursuant to which the Seller granted to the Company an interest in intellectual property relating to medical patents held by the estate of Power3 Medical Products, Inc. (the “Estate”). Under the terms of the Bill of Sale, the Company will provide to the Seller consideration of \$40,000 plus the retention of the Estate’s Company stock in return for the intellectual property.

On January 30, 2013, the Company executed an amendment to a Convertible Promissory Note payable to Dominion Capital, LLC or its registered assigns (the “Dominion Note”), dated November 14, 2012, 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 Dominion Note bears interest at the rate of ten percent (10%) per annum until paid in full and is convertible into shares of the Company’s common stock, subject to certain restrictions, at a price of \$0.10 per share. The Dominion 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 Dominion 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 30th, 2013. The extended amortization schedule provides for payments of \$200,000 to \$250,000 every 2 weeks until the end of April 2013.

On February 7, 2013, the Company completed a series of transactions related to the restructuring of certain convertible debentures and related warrants that are currently in default. As a result, the Company executed two separate amended and restated Convertible Promissory Notes in the amounts of \$375,000 and \$187,500 (the “New Notes”), respectively, payable to Dominion Capital, LLC. The Company had defaulted on Promissory Notes issued in 2011 to certain individual investors in the total aggregate amount of \$375,000 (the “Old Notes”), and related cashless warrants in the amount of \$500,000. Dominion capital paid \$562,500 to acquire the Old Notes, and as part of the transaction all of the related warrants have been retired, inclusive of a \$37,500 payment from the Company to certain warrant holders. The Old Notes and Related warrants had a conversion feature equal to a 66.6% floorless discount to a

'Next Equity Financing', defined as a financing where equity, or debt that was convertible into common stock, with a fixed price conversion feature. As a result of the 30 January financing previously announced, the Old Notes and Warrants, inclusive of interest, would have been convertible into approximately \$900,000 in common shares priced at \$0.0333/share, which would have equated to 27,000,000 common shares.

As a result, of the transactions listed above, \$375,000 note is immediately convertible at a price of \$0.015/share, equal to 25,000,000 common shares. The \$187,500 is also priced at \$0.015/share, however the note is not convertible for 6 months and the Company can repurchase this note at any time until maturity.

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Concurrently, the Company has retired a series of convertible notes terms that were issued between June 30, 2013 and November 1, 2013 with conversion prices with floating discount to market conversion features built into them. These notes were either converted into shares at the terms stated in the note, or repurchased by the Company at a premium of 25% to 50% of the face value of the note.

As a result of these transactions, the Company has eliminated the costly potential default and reset provisions associated with the Old Notes and Warrants that the Company believes were a potential impediment to future growth and more favorable future financing alternatives. With the retirement of the Old Notes and repurchase by the Company of the Warrants, the Company is no longer in default of any convertible notes or warrants, and has eliminated the risk of the further dilutive potential of resets and default provisions contained within those retired instruments. The Company believes that this has streamlined and enhanced its capitalization structure placing the Company in a better position to move forward with the execution of its scientific advancement plan.

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 Parkinson's disease, and secondarily other apoptosis-related disorders including ischemic heart disease, traumatic brain injury and orphan diseases;
- 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 opportunity to further develop its BC-SeraPro, NuroPro and PhenoGuard assets.

OVERVIEW

Amarantus owns the intellectual property rights to a novel therapeutic protein called MANF acquired from EMS Development Group in 2008. MANF is a novel, endogenous, evolutionally conserved and widely expressed secreted human protein. Management and scientists believe that MANF is the first of a new class of therapeutic proteins that

are secreted in response to stressful physiological conditions in the body. MANF is believed to have mechanisms of action that are fundamentally different from other therapeutic proteins. MANF decreases the activity of apoptosis-causing enzymes, corrects protein misfolding and increases neurotransmitter release.

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.

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DEVELOPMENT PLAN

The Company intends to focus on developing MANF as a therapeutic protein for Parkinson's disease with the intention of gaining Investigational New Drug Status with the FDA in order to initiate human clinical studies in the United States in the second half of 2014. Amaranthus intends to perform animal proof-of-concept studies in the areas of Myocardial Infarction, Traumatic Brain Injury and Organ Transplantation. In addition over the next 12 months, the Company intends to focus its product development efforts on the establishment of GMP-grade material and MANF's safety profile through toxicology studies in order to gain regulatory approval to initiate human clinical studies. This will provide the experimental rationale for moving forward into human clinical studies for the treatment of Parkinson's disease. The Company will also evaluate additional indications for MANF.

For the next 12 months, the Company intends to focus the diagnostic development of LymPro on gaining regulatory approval to initiate commercial sales of LymPro as a Laboratory Developed Test ("LDT") under the Clinical Laboratory Improvement Amendments ("CLIA"). The Company intends to initiate an initial clinical study in the first half of 2013 to confirm methods previously published in scientific journals, and begin a Phase 2 Validation study to support LDT status in the second half of 2013.

Markets

Parkinson's Disease

Parkinson's disease (PD) is a severe neurological disorder characterized by tremor, muscle rigidity, and an inability to walk with a steady gait. PD was first reported by James Parkinson in 1817. It is currently widely accepted that PD is primarily associated with the degeneration of a specific set of dopaminergic (DA) neurons in the human brain located in the midbrain. According to the NIH, symptoms begin to appear when 60-80% of these DA neurons have become dysfunctional or have died. Humans have roughly 1 million of these critical DA neurons in the midbrain that play a vital role in controlling motor functions such as walking, stability and overall muscle control. DA neurons release the neurotransmitter dopamine, which plays a critical role in motor function. When a person is diagnosed with PD, roughly 600,000 to 800,000 of these DA neurons have already degenerated or have died. The remaining DA neurons continue to degenerate as PD progresses until such a time when there aren't enough DA neurons left for the body to function. PD progresses at different rates in different patients. Ultimately, every patient becomes incapable of functioning independently at a certain point in the progression of his or her PD. According to the NIH, it is estimated that at least 500,000 people are afflicted with this disorder in the United States. PD generally affects patients later in life, with an average onset age of 60. NIH estimates the total cost to the nation exceeds \$6 billion annually.

According to a 2008 report generated by DataMonitor, there are over 1.5 million PD in the United States, Western Europe and Japan spending in excess of \$3 billion annually on treatments. It is widely accepted that with the increasing trend towards a longer lifespan coupled with the baby-boomer population approaching retirement, the

incidence of Parkinson's disease is likely to double in the next 20 years.

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Alzheimer's Disease

Alzheimer's disease (AD) is a chronic neurodegenerative disorder affecting millions of people worldwide. It is the number one form of dementia in the world, where dementia encompasses a variety of causes in which the cells of the brain no longer function properly. The risk of being afflicted with AD increases with age, with one in nine people over the age of 65 having the disease. The prevalence of the disease is approximately 5.2 million individuals in the US suffer from AD in 2013, with only half those people with a physician's diagnosis. On the other hand, the incidence (or rate at which new cases of disease develop) is age dependent with approximately 53 new cases per 1,000 people age 65 to 74, to 170 new cases per 1,000 people age 75 to 84, to 231 new cases per 1,000 people age 85 and older. [aa2013:108] with 454,000 new cases occurring in 2010 [Alzheimer's Association, 2013 Alzheimer's Disease Facts and Figures, Alzheimer's & Dementia, Volume 9, Issue 2]. AD is the sixth leading cause of death across all ages in the United States [AA2013: 113], and its prevalence is expected to quadruple by 2050. Unfortunately compared to cardiovascular disease, stroke, prostate and breast cancers, AD is the only cause of death increasing, and increasing fast with an estimated 68% change in death from 2000 to 2010. In 2012, 15.4 million caregivers provided an estimated 17.5 billion hours of unpaid care, valued at more than \$216 bBillion. [aa2013, p30]. It is estimated that the cost of caring for people with AD and other dementia's will rocket northwards from an estimated \$203 bBillion in 2013 to a projected \$1.2 tTrillion per year by 2050 with Medicare and Medicaid covering approximately 70% of costs. [aa2013, p 42,43]

The cause and progression of Alzheimer's disease are not well understood. Research indicates that the disease is associated with plaques and tangles in the brain. Current treatments only help with the symptoms of the disease. There are no available treatments that stop or reverse the progression of the disease. As of 2012, more than 1000 clinical trials have been or are being conducted to find ways to treat the disease, but it is unknown if any of the tested treatments will work. Mental stimulation, exercise, and a balanced diet have been suggested as ways to delay cognitive symptoms (though not brain pathology) in healthy older individuals, but there is no conclusive evidence supporting an effect. Because AD cannot be cured and is degenerative, the sufferer relies on others for assistance. The role of the main caregiver is often taken by the spouse or a close relative. Alzheimer's disease is known for placing a great burden on caregivers; the pressures can be wide-ranging, involving social, psychological, physical, and economic elements of the caregiver's life. In developed countries, AD is one of the most costly diseases to society.

According to the Alzheimer's Disease Foundation. It is widely accepted that with the increasing trend towards a longer lifespan coupled with the baby-boomer population approaching retirement, the incidence of Parkinson's disease is likely to double in the next 20 years.

COMPETITION

MANF in Parkinson's disease

The biopharmaceutical industry is characterized by rapidly evolving technology and intense competition. Our competitors include major pharmaceutical and biotechnology companies focusing on PD such as MedGenesis, Ceregene and Amsterdam Molecular. Most of our competitors have financial, technical and marketing resources significantly greater than our resources. Academic institutions, governmental agencies and other public and private research organizations are also conducting research activities and seeking patent protection and may commercialize products on their own or through joint ventures. The Company is aware of certain development projects for products to prevent or treat certain diseases targeted by us. The existence of these potential products or other products or treatments of which we are not aware, or products or treatments that may be developed in the future, may adversely affect our ability to market the products we develop.

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LymPro Alzheimer's disease Diagnostics

The competitive landscape (from most to least invasive procedure/process):

1.1. Cerebrospinal Fluid (CSF)

CSF samples and protein assays of particular analytes remain today the best tools in the diagnosis of Alzheimer's disease and encephalitis. Unfortunately, the procedure involves a lumbar puncture - the insertion of a hollow cannula or needle into the lower spinal column in order to collect 5-10 ml of blood free CSF. Most patients find the thought of a lumbar puncture procedure troubling. Additionally, many who undergo lumbar puncture procedures find the procedure painful, and unfortunately until recently there haven't been any in vitro diagnostic quality assays available to replace the lumbar puncture diagnostic procedure (until Saladax / Ortho Clinical Diagnostics or Roche Diagnostics releases their publically report CSF Ab42 and CSF Tau assays).

1.2. Positron Emission Tomography (PET)

These large multi-million dollar cameras collect the radioactive decay of minute quantities of hot radioactive tracers that are injected into the blood stream and which give off correlated photo pairs indicating where the tracer is staining tissue in vivo. FDG-PET is an FDA approved tracer which measures glucose metabolism and has been successfully used to image brain energy consumption. More recently Amyvid from Avid Radiopharmaceuticals, now Lilly Diagnostics received FDA approval as a radiotracer to in vivo label the amyloid plaques of the brain. Unfortunately, these studies cost \$3,000-\$5,000 per imaging session per patient and aren't accessible to mobile and portable sites of use. Expensive detectors with costly reagents that aren't widely available are not a viable path forward given the pending health care cost reduction initiatives.

1.3. Magneto encephalography (MEG)

These huge and costly instruments employ advanced superconducting magnets near absolute zero temperatures to measure minute currents of the brain. They are fantastic instruments of technology but are scarcely available in the US and Japan, let alone any other country in the world. They are great research tools and Amaranthus may try to collaborate with researchers using them in investigations - but they will likely never become common place in clinical practice in their present form.

1.4. Magnetic Resonance Imaging (MRI)

These common place instruments are able to measure the gross anatomy of the brain within the skull with resolution approaching 100 microns in a standard 1.5T clinical MRI. Although they are costly and accessible only at an imaging center (in patient or outpatient), they are standard of care to insure that there is no gross brain tumor or evidence of white matter infarct, typical after sub-clinical or mini strokes have occurred. In one costly modality, functional MRI is conducted whereby a patient is given tasks to complete while they are lying in a MRI brain scanner and asked to participate in task based maneuvers to understand which anatomical structures are active during which dynamic task. These expensive studies are difficult to implement well as motion artifacts and noise are a challenge. In routine clinical practice, they are not commonly conducted.

1.5. Blood

Blood is the ultimate biological specimen. The entire AD community would love to find blood based biomarkers and thus diagnostics of the brain yet there is one major hurdle that no one has yet to solve. Mother Nature created the Blood Brain Barrier to provide a protective barrier from internal insult within a host. No one has compellingly shown that a peripheral measure in the blood is truly diagnostic of what is going on within the privileged compartment of the brain and the central nervous system. For this reason, discovery of blood based biomarkers for Alzheimer's are probable at best. The necessary verification and validation of any of those markers by several groups at arm's length has not yet occurred and a lot of research will be required to demonstrate that the peripheral measure in the blood is meaningfully reflective of the brain and CNS.

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1.6. Electro encephalography (EEG)

EEG is well known now for nearly a century since Hans Burger in 1928 discovered the surface potentials on the scalp. In contrast to most other neuro imaging techniques, EEG is trying to make movies of the brain to capture dynamics, not take static snapshots with long periodicity between them. Unfortunately, over 80%-90% of the peer reviewed EEG literature is constrained by the request to record the human subject in a “resting state eyes open” or “resting state eyes closed” condition. Recordings consist of typically, 20, 32, 64 or 128 electrodes and span a twenty minute sample of time. Unfortunately, the brain can’t rest for 20 minutes let alone even 1 minute as it wanders off and thinks about other activities. For these reasons, we believe the attempts to use EEG diagnostically have failed and will continue to fail until one activates the brain in the attempt to find and measure characteristic EEG biomarker features of one brain state versus another.

1.7. Cognition

There are many companies creating cognitive assessments of a human subject from a neuropsychological perspective. Many of these are quite good, including the CogState battery of tasks, the CNS Vital Signs, the CANTAB battery. This said, all of these computer cognition assessment tools are plagued by significant limitations on their ability to accurately and objectively measurement brain function. Equally importantly, they are prone to subject bias as they require cooperation from the participant and can be fooled by human subjects interested to cheat the test and system. Amaranthus finds them an excellent starting point and would like to continue to partner with cognitive task companies, but is very confident that the ImpACT test, the CANTAB battery, the CogState battery, etc., will likely never become sufficient to characterize the health of the brain.

Manufacturing

The Company does not have any in-house manufacturing capabilities. The Company intends to outsource the manufacturing of its MANF and LymPro products to third party contractors, with special capabilities to manufacture biological drug candidates and In-vitro Diagnostics (“IVDs”) for submission and clinical testing under FDA guidelines.

Distribution & Marketing

The Company intends to develop its product candidates and utilize its deep industry connections to effect partnering transactions with biopharmaceutical companies seeking to strategically fortify pipelines and fund the costly later-stage clinical development required to achieve successful commercialization. As such, the Company does not anticipate selling products directly into the marketplace, although it retains the right to so depending on market conditions; rather Amaranthus intends to effect partnering transactions which will give the Company a distribution and marketing

partner to sell products into the marketplace, allowing the Company to focus on the research and product development which represent the Company's core competencies.

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Government Regulation

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Federal Food, Drug, and Cosmetic Act and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. The FDA has very broad enforcement authority and failure to abide by applicable regulatory requirements can result in administrative or judicial sanctions being imposed on us, including warning letters, refusals of government contracts, clinical holds, civil penalties, injunctions, restitution, disgorgement of profits, recall or seizure of products, total or partial suspension of production or distribution, withdrawal of approval, refusal to approve pending applications, and criminal prosecution.

FDA Approval Process

The Company believes that its product candidates will be regulated by the FDA as drugs. No manufacturer may market a new drug until it has submitted a New Drug Application, or NDA, to the FDA, and the FDA has approved it. The steps required before the FDA may approve an NDA generally include:

- preclinical laboratory tests and animal tests conducted in compliance with FDA's good laboratory practice requirements;
- development, manufacture and testing of active pharmaceutical product and dosage forms suitable for human use in compliance with current good manufacturing practices, or GMP;
- the submission to the FDA of an investigational new drug application, or IND, for human clinical testing, which must become effective before human clinical trials may begin;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the product for its specific intended use(s);
- the submission to the FDA of a New Drug Application, or NDA; and
- FDA review and approval of the NDA.

Preclinical tests include laboratory evaluation of the product candidate, as well as animal studies to assess the potential safety and efficacy of the product candidate. The conduct of the pre-clinical tests must comply with federal regulations and requirements including good laboratory practices. The Company must submit the results of the preclinical tests, together with manufacturing information, analytical data and a proposed clinical trial protocol to the FDA as part of an IND, which must become effective before it may commence human clinical trials. The IND will automatically become effective 30 days after its receipt by the FDA, unless the FDA raises concerns or questions

before that time about the conduct of the proposed trials. In such a case, the Company must work with the FDA to resolve any outstanding concerns before clinical trials can proceed. The Company cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trials. The study protocol and informed consent information for patients in clinical trials must also be submitted to an institutional review board for approval. An institutional review board may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the institutional review board's requirements or may impose other conditions.

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Clinical trials involve the administration of the product candidate to humans under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are typically conducted in three sequential phases, though the phases may overlap or be combined. In Phase 1, the initial introduction of the drug into healthy human subjects, the drug is usually tested for safety (adverse effects), dosage tolerance and pharmacologic action, as well as to understand how the drug is taken up by and distributed within the body. Phase 2 usually involves studies in a limited patient population (individuals with the disease under study) to:

- evaluate preliminarily the efficacy of the drug for specific, targeted conditions;
- determine dosage tolerance and appropriate dosage as well as other important information about how to design larger Phase 3 trials; and
- identify possible adverse effects and safety risks.

Phase 3 trials generally further evaluate clinical efficacy and test for safety within an expanded patient population. The conduct of the clinical trials is subject to extensive regulation, including compliance with good clinical practice regulations and guidance.

The FDA may order the temporary or permanent discontinuation of a clinical trial at any time or impose other sanctions if it believes that the clinical trial is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. The Company may also suspend clinical trials at any time on various grounds.

The results of the preclinical and clinical studies, together with other detailed information, including the manufacture and composition of the product candidate, are submitted to the FDA in the form of an NDA requesting approval to market the drug. FDA approval of the NDA is required before marketing of the product may begin in the U.S. If the NDA contains all pertinent information and data, the FDA will "file" the application and begin review. The FDA may "refuse to file" the NDA if it does not contain all pertinent information and data. In that case, the applicant may resubmit the NDA when it contains the missing information and data. Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of new drug applications. Most such applications for non-priority drug products are reviewed within 10 months. The review process, however, may be extended by FDA requests for additional information, preclinical or clinical studies, clarification regarding information already provided in the submission, or submission of a risk evaluation and mitigation strategy. The FDA may refer an application to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. Before approving an NDA, the FDA will typically inspect the facilities at which the product candidate is manufactured and will not approve the product candidate unless GMP compliance is satisfactory. FDA also typically inspects facilities responsible for performing animal testing, as well as clinical investigators who participate in clinical trials. The FDA may refuse to approve an NDA if applicable regulatory criteria are not satisfied, or may require additional testing or information. The FDA may also limit the indications for use and/or require post-marketing testing and surveillance to monitor the safety or efficacy of a product. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not

maintained or problems are identified following initial marketing.

The testing and approval process requires substantial time, effort and financial resources, and our product candidates may not be approved on a timely basis, if at all. The time and expense required to perform the clinical testing necessary to obtain FDA approval for regulated products can frequently exceed the time and expense of the research and development initially required to create the product. The results of preclinical studies and initial clinical trials of the Company's product candidates are not necessarily predictive of the results from large-scale clinical trials, and clinical trials may be subject to additional costs, delays or modifications due to a number of factors, including difficulty in obtaining enough patients, investigators or product candidate supply. Failure by the Company to obtain, or any delay in obtaining, regulatory approvals or in complying with requirements could adversely affect the commercialization of product candidates and the Company's ability to receive product or royalty revenues.

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Other Regulatory Requirements

After approval, drug products are subject to extensive continuing regulation by the FDA, which include company obligations to manufacture products in accordance with Good Manufacturing Practice, or GMP, maintain and provide to the FDA updated safety and efficacy information, report adverse experiences with the product, keep certain records and submit periodic reports, obtain FDA approval of certain manufacturing or labeling changes, and comply with FDA promotion and advertising requirements and restrictions. Failure to meet these obligations can result in various adverse consequences, both voluntary and FDA-imposed, including product recalls, withdrawal of approval, restrictions on marketing, and the imposition of civil fines and criminal penalties against the NDA holder. In addition, later discovery of previously unknown safety or efficacy issues may result in restrictions on the product, manufacturer or NDA holder.

The Company and any manufacturers of its products are required to comply with applicable FDA manufacturing requirements contained in the FDA's GMP regulations. GMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation. The manufacturing facilities for the Company's products must meet GMP requirements to the satisfaction of the FDA pursuant to a pre-approval inspection before it can use them to manufacture its products. The Company and any third-party manufacturers are also subject to periodic inspections of facilities by the FDA and other authorities, including procedures and operations used in the testing and manufacture of its products to assess its compliance with applicable regulations.

With respect to post-market product advertising and promotion, the FDA imposes a number of complex regulations on entities that advertise and promote pharmaceuticals, which include, among others, standards for direct-to-consumer advertising, promoting drugs for uses or in patient populations that are not described in the drug's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities, and promotional activities involving the internet. Failure to comply with FDA requirements can have negative consequences, including adverse publicity, enforcement letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses.

Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

Adverse event reporting and submission of periodic reports is required following FDA approval of an NDA. The FDA also may require post-marketing testing, known as Phase 4 testing, risk minimization action plans and surveillance to monitor the effects of an approved product or place conditions on an approval that could restrict the distribution or use of the product.

Outside the United States, the Company's ability to market a product is contingent upon receiving marketing authorization from the appropriate regulatory authorities. The requirements governing marketing authorization, pricing and reimbursement vary widely from jurisdiction to jurisdiction. At present, foreign marketing authorizations are applied for at a national level, although within the European Union registration procedures are available to companies wishing to market a product in more than one European Union member state.

The Company is also subject to various environmental, health and safety regulations including those governing laboratory procedures and the handling, use, storage, treatment, and disposal of hazardous materials. From time to time, and in the future, the Company's operations may involve the use of hazardous materials.

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INTELLECTUAL PROPERTY

The Company is able to protect its technology from unauthorized use by third parties only to the extent that it is covered by valid and enforceable patents or is effectively maintained as a trade secret or is protected by confidentiality agreements. Accordingly, patents or other proprietary rights are an essential element of the Company's business.

Patents extend for varying periods according to the date of patent filing or grant and the legal term of patents in the various countries where patent protection is obtained. The actual protection afforded by a patent, which can vary from country to country, depends on the type of patent, the scope of its coverage and the availability of legal remedies in the country.

While trade secret protection is an essential element of the Company's business and it has taken security measures to protect its proprietary information and trade secrets, the Company cannot give assurance that its unpatented proprietary technology will afford it significant commercial protection. The Company seeks to protect its trade secrets by entering into confidentiality agreements with third parties, employees and consultants. The Company's employees and consultants also sign agreements requiring that they assign to the Company their interests in intellectual property arising from their work for the Company. All employees sign an agreement not to engage in any conflicting employment or activity during their employment with the Company and not to disclose or misuse confidential information. However, it is possible that these agreements may be breached or invalidated, and if so, there may not be an adequate corrective remedy available. Accordingly, the Company cannot ensure that employees, consultants or third parties will not breach the confidentiality provisions in its contracts, infringe or misappropriate its trade secrets and other proprietary rights or that measures the Company is taking to protect its proprietary rights will be adequate.

In the future, third parties may file claims asserting that the Company's technologies or products infringe on their intellectual property. The Company cannot predict whether third parties will assert such claims against it or against the licensors of technology licensed to it, or whether those claims will harm its business. If the Company is forced to defend itself against such claims, whether they are with or without merit and whether they are resolved in favor of, or against, the Company's licensors or the Company, the Company may face costly litigation and the diversion of management's attention and resources. As a result of such disputes, the Company may have to develop costly non-infringing technology or enter into licensing agreements. These agreements, if necessary, may be unavailable on terms acceptable to the Company, or at all.

Employees

The Company has three (3) employees as of April 12, 2013 and the Company believes its employee relations are satisfactory. The Company intends to expand the Company's management team and support staff over the next 12 months to meet the growing demands of developing the Company's business objectives.

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Item 1A. Risk Factors.

Risks Related to Our Product Candidates and Operations

We are largely dependent on the success of our lead product candidate, MANF and we may not be able to successfully commercialize this product.

We have incurred and will continue to incur significant costs relating to the development of our lead product candidate, MANF. We have not obtained approval to commercialize MANF in any jurisdiction and we may never be able to obtain approval or, if approvals are obtained, to commercialize MANF successfully.

If we fail to successfully commercialize our products, we may be unable to generate sufficient revenue to sustain and grow our business, and our business, financial condition and results of operations will be adversely affected.

If we fail to obtain U.S. regulatory approval of MANF or any of our other current or future product candidates, we will be unable to commercialize these potential products in the United States.

The development, testing, manufacturing and marketing of our product candidates are subject to extensive regulation by governmental authorities in the United States. In particular, the process of obtaining FDA approval is costly and time consuming, and the time required for such approval is uncertain. Our product candidates must undergo rigorous preclinical and clinical testing and an extensive regulatory approval process mandated by the FDA. Such regulatory review includes the determination of manufacturing capability and product performance. Generally, only a small percentage of pharmaceutical products are ultimately approved for commercial sale.

We can give no assurance that our current or future product candidates will be approved by the FDA or any other governmental body. In addition, there can be no assurance that all necessary approvals will be granted for future product candidates or that FDA review or actions will not involve delays caused by requests for additional information or testing that could adversely affect the time to market for and sale of our product candidates. Further failure to comply with applicable regulatory requirements can, among other things, result in the suspension of regulatory approval as well as possible civil and criminal sanctions.

Our proprietary rights may not adequately protect our intellectual property and product candidates and if we cannot obtain adequate protection of our intellectual property and product candidates, we may not be able to successfully market our product candidates.

Our commercial success will depend in part on obtaining and maintaining intellectual property protection for our technologies and product candidates. We will only be able to protect our technologies and product candidates from unauthorized use by third parties to the extent that valid and enforceable patents cover them, or that other market exclusionary rights apply.

While we have issued enforceable patents covering our product candidates, the patent positions of life sciences companies, like ours, can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States. The general patent environment outside the United States also involves significant uncertainty. Accordingly, we cannot predict the breadth of claims that may be allowed or that the scope of these patent rights would provide a sufficient degree of future protection that would permit us to gain or keep our competitive advantage with respect to these products and technology.

Our issued patents may be subject to challenge and possibly invalidated by third parties. Changes in either the patent laws or in the interpretations of patent laws in the United States or other countries may diminish the market exclusionary ability of our intellectual property.

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In addition, others may independently develop similar or alternative compounds and technologies that may be outside the scope of our intellectual property. Should third parties obtain patent rights to similar compounds or radiolabeling technology, this may have an adverse effect on our business.

To the extent that consultants or key employees apply technological information independently developed by them or by others to our product candidates, disputes may arise as to the proprietary rights of the information, which may not be resolved in our favor. Consultants and key employees that work with our confidential and proprietary technologies are required to assign all intellectual property rights in their discoveries to us. However, these consultants or key employees may terminate their relationship with us, and we cannot preclude them indefinitely from dealing with our competitors. If our trade secrets become known to competitors with greater experience and financial resources, the competitors may copy or use our trade secrets and other proprietary information in the advancement of their products, methods or technologies. If we were to prosecute a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time consuming and the outcome would be unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets than courts in the United States.

Moreover, if our competitors independently develop equivalent knowledge, we would lack any contractual claim to this information, and our business could be harmed.

If our product candidates, including MANF, do not gain market acceptance among physicians, patients and the medical community, we will be unable to generate significant revenue, if any.

The products that we develop may not achieve market acceptance among physicians, patients, third-party payers and others in the medical community. If we, or any of our partners, receive the regulatory approvals necessary for commercialization, the degree of market acceptance will depend upon a number of factors, including:

- limited indications of regulatory approvals;
- the establishment and demonstration in the medical community of the clinical efficacy and safety of our product candidates and their potential advantages over existing diagnostic compounds;
- the prevalence and severity of any side effects;
- our ability to offer our product candidates at an acceptable price;
- the relative convenience and ease of administration of our products;
- the strength of marketing and distribution support; and
- sufficient third-party coverage or reimbursement.

The market may not accept MANF or MANF based products based on any number of the above factors. The market may choose to continue utilizing the existing products for any number of reasons, including familiarity with or pricing of these existing products. The failure of any of our product candidates to gain market acceptance could impair our ability to generate revenue, which could have a material adverse effect on our future business and prevent us from obtaining the necessary partnerships to further our business strategy.

Risks Associated with Our Financial Condition

Our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern, which may hinder our ability to obtain future financing.

Our consolidated financial statements as of December 31, 2012 were prepared under the assumption that we will continue as a going concern for the next twelve months. Our independent registered public accounting firm has issued a report that included an explanatory paragraph referring to our projected future losses along with recurring losses from operations and expressing substantial doubt in our ability to continue as a going concern without additional capital becoming available. Our ability to continue as a going concern is dependent upon our ability to obtain additional equity or debt financing, attain further operating efficiencies, reduce expenditures, and, ultimately, to generate revenue. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

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We are at an early stage of development as a company and currently have no source of revenue and may never become profitable.

We are a development stage biopharmaceutical company. Currently, we have no products approved for commercial sale and, to date, we have not generated any revenue. Our ability to generate revenue depends heavily on:

- demonstration in future clinical trials that our product candidate, MANF for the treatment of PD is safe and effective;
- our ability to seek and obtain regulatory approvals, including with respect to the indications we are seeking;
- successful manufacture and commercialization of our product candidates; and
- market acceptance of our products.

All of our existing product candidates are in various stages of development and will require extensive additional preclinical and clinical evaluation, regulatory review and approval, significant marketing efforts and substantial investment before they could provide us with any revenue. As a result, if we do not successfully develop, achieve regulatory approval and commercialize MANF, we will be unable to generate any revenue for many years, if at all. We do not anticipate that we will generate revenue for several years, at the earliest, or that we will achieve profitability for at least several years after generating material revenue, if at all. If we are unable to generate revenue, we will not become profitable, and we may be unable to continue our operations.

We do not have any products that are approved for commercial sale and therefore do not expect to generate any revenues from product sales in the foreseeable future, if ever.

We currently do not have any products that are approved for commercial sale. To date, we have funded our operations primarily from grants and sales of our securities. We have not received, and do not expect to receive for at least the next several years, if at all, any revenues from the commercialization of our product candidates. To obtain revenues from sales of our product candidates, we must succeed, either alone or with third parties, in developing, obtaining regulatory approval for, manufacturing and marketing drugs with commercial potential. We may never succeed in these activities, and may not generate sufficient revenues to continue our business operations or achieve profitability.

We have incurred significant losses since inception and anticipate that we will incur continued losses for the foreseeable future.

As of December 31, 2012, we had an accumulated deficit of approximately \$11.86 million. We expect to incur significant and increasing operating losses for the next several years as we expand our research and development, advance product candidates into clinical development, complete clinical trials, seek regulatory approval and, if we receive FDA approval, commercialize our products. Because of the numerous risks and uncertainties associated with product development efforts, we are unable to predict the extent of any future losses or when we will become profitable, if at all. If we are unable to achieve and then maintain profitability, the market value of our common stock will likely decline.

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We will need to raise substantial additional capital to fund our operations, and our failure to obtain funding when needed may force us to delay, reduce or eliminate certain product development programs.

During the twelve months ended December 31, 2012, our operating activities used net cash of approximately \$3.9 million. We expect to continue to spend substantial amounts to:

- continue development of our product candidates;
- finance our general and administrative expenses;
- license or acquire additional technologies;
- manufacture product for clinical trials;
- launch and commercialize our product candidates, if any such product candidates receive regulatory approval; and
- develop and implement sales, marketing and distribution capabilities.

We will be required to raise additional capital to complete the development and commercialization of our product candidates and to continue to fund operations at the current cash expenditure levels. Our future funding requirements will depend on many factors, including, but not limited to:

- the rate of progress and cost of our clinical trials and other development activities;
- any future decisions we may make about the scope and prioritization of the programs we pursue;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the costs of manufacturing product;
- the costs and timing of regulatory approval;
- the costs of establishing sales, marketing and distribution capabilities;
- the effect of competing technological and market developments;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish; and
- general market conditions for offerings from biopharmaceutical companies.

Worldwide economic conditions and the international equity and credit markets have recently significantly deteriorated and may remain depressed for the foreseeable future. These developments could make it more difficult for us to obtain additional equity or credit financing, when needed.

We cannot be certain that funding will be available on acceptable terms, or at all. To the extent that we raise additional funds by issuing equity securities, our stockholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants that impacts our ability to conduct our business. If we are unable to raise additional capital when required or on acceptable terms, we may have to significantly delay, scale back or discontinue the development and/or commercialization of one or more of our product candidates. We also may be required to:

- seek collaborators for our product candidates at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; and/or
- relinquish license or otherwise dispose of rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves on unfavorable terms.

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Risks Associated with Management

If we are unable to hire and retain key personnel, we may not be able to implement our business plan.

Due to the specified nature of our business, having certain key personnel is essential to the development and marketing of the products we plan to sell and thus to the entire business itself. Consequently, the loss of any of those individuals may have a substantial effect on our future success or failure. We may have to recruit qualified personnel with competitive compensation packages, equity participation, and other benefits that may affect the working capital available for our operations. Management may have to seek to obtain outside independent professionals to assist them in assessing the merits and risks of any business proposals as well as assisting in the development and operation of many company projects. No assurance can be given that we will be able to obtain such needed assistance on terms acceptable to us. Our failure to attract additional qualified employees or to retain the services of key personnel could have a material adverse effect on our operating results and financial condition.

Risks Related to Our Common Stock

Our stock price may be volatile.

The stock market, particularly in recent years, has experienced significant volatility particularly with respect to pharmaceutical, biotechnology and other life sciences company stocks. The volatility of pharmaceutical, biotechnology and other life sciences company stocks often does not relate to the operating performance of the companies represented by the stock. Factors that could cause this volatility in the market price of our common stock include:

- results from and any delays in our clinical trials;
- failure or delays in entering additional product candidates into clinical trials;
- failure or discontinuation of any of our research programs;
- delays in establishing new strategic relationships;
- delays in the development or commercialization of our potential products;
- market conditions in the pharmaceutical and biotechnology sectors and issuance of new or changed securities analysts' reports or recommendations;
- actual and anticipated fluctuations in our financial and operating results;

- developments or disputes concerning our intellectual property or other proprietary rights;
- introduction of technological innovations or new commercial products by us or our competitors;
- issues in manufacturing our potential products;
- market acceptance of our potential products;
- third-party healthcare reimbursement policies;
- FDA or other domestic or foreign regulatory actions affecting us or our industry;
- litigation or public concern about the safety of our product candidates; and
- additions or departures of key personnel.

These and other external factors may cause the market price and demand for our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In the past, when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. Such a lawsuit could also divert the time and attention of our management.

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We have not and do not anticipate paying any dividends on our common stock.

We have paid no dividends on our common stock to date and it is not anticipated that any dividends will be paid to holders of our common stock in the foreseeable future. While our future dividend policy will be based on the operating results and capital needs of the business, it is currently anticipated that any earnings will be retained to finance our future expansion and for the implementation of our business plan. As an investor, you should take note of the fact that a lack of a dividend can further affect the market value of our stock, and could significantly affect the value of any investment in our Company.

If we fail to establish and maintain an effective system of internal control, we may not be able to report our financial results accurately or to prevent fraud. Any inability to report and file our financial results accurately and timely could harm our reputation and adversely impact the trading price of our common stock.

Effective internal control is necessary for us to provide reliable financial reports and prevent fraud. If we cannot provide reliable financial reports or prevent fraud, we may not be able to manage our business as effectively as we would if an effective control environment existed, and our business and reputation with investors may be harmed. As a result, our small size and any current internal control deficiencies may adversely affect our financial condition, results of operation and access to capital. We have not performed an in-depth analysis to determine if historical un-discovered failures of internal controls exist, and may in the future discover areas of our internal control that need improvement.

The limited trading market for our common stock results in limited liquidity for shares of our common stock and significant volatility in our stock price.

Although prices for our shares of common stock are quoted on the OTCQB Marketplace (“OTCQB”), there is little current trading and no assurance can be given that an active public trading market will develop or, if developed, that it will be sustained. The OTCQB is generally regarded as a less efficient and less prestigious trading market than other national markets. There is no assurance if or when our common stock will be quoted on another more prestigious exchange or market. Active trading markets generally result in lower price volatility and more efficient execution of buy and sell orders. The absence of an active trading market reduces the liquidity of our common stock.

The market price of our stock is likely to be highly volatile because for some time there will likely be a thin trading market for the stock, which causes trades of small blocks of stock to have a significant impact on our stock price. As a result of the lack of trading activity, the quoted price for our common stock on the OTCQB is not necessarily a reliable indicator of its fair market value. Further, if we cease to be quoted, holders of our common stock would find it more difficult to dispose of, or to obtain accurate quotations as to the market value of, our common stock, and the market value of our common stock would likely decline.

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Our common stock is currently deemed a “penny stock,” which makes it more difficult for our investors to sell their shares.

Our common stock is subject to the “penny stock” rules adopted under Section 15(g) of the Exchange Act. The penny stock rules generally apply to companies whose common stock is not listed on The Nasdaq Stock Market or other national securities exchange and trades at less than \$4.00 per share, other than companies that have had average revenue of at least \$6,000,000 for the last three years or that have tangible net worth of at least \$5,000,000 (\$2,000,000 if the company has been operating for three or more years). These rules require, among other things, that brokers who trade penny stock to persons other than “established customers” complete certain documentation, make suitability inquiries of investors and provide investors with certain information concerning trading in the security, including a risk disclosure document and quote information under certain circumstances. Many brokers have decided not to trade penny stocks because of the requirements of the penny stock rules and, as a result, the number of broker-dealers willing to act as market makers in such securities is limited. If we remain subject to the penny stock rules for any significant period, it could have an adverse effect on the market, if any, for our securities. If our securities are subject to the penny stock rules, investors will find it more difficult to dispose of our securities.

Offers or availability for sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

If our stockholders sell substantial amounts of our common stock in the public market upon the expiration of any statutory holding period, under Rule 144, or issued upon the exercise of outstanding options or warrants, it could create a circumstance commonly referred to as an “overhang” and in anticipation of which the market price of our common stock could fall. The existence of an overhang, whether or not sales have occurred or are occurring, also could make more difficult our ability to raise additional financing through the sale of equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate.

Our certificate of incorporation allows for our board to create new series of preferred stock without further approval by our stockholders, which could adversely affect the rights of the holders of our common stock.

Our board of directors has the authority to fix and determine the relative rights and preferences of preferred stock and has designated 5,000,000 preferred shares as Series A Preferred Stock and 2,500,000 as Series B Convertible Preferred Stock. Our board of directors also has the authority to issue additional shares of our preferred stock without further stockholder approval. As a result, our board of directors could authorize the issuance of a series of preferred stock that would grant to holders the preferred right to our assets upon liquidation, the right to receive dividend payments before dividends are distributed to the holders of common stock and the right to the redemption of the shares, together with a premium, prior to the redemption of our common stock. In addition, our board of directors could authorize the issuance of a series of preferred stock that has greater voting power than our common stock or that is convertible into our common stock, which could decrease the relative voting power of our common stock or result in dilution to our existing stockholders.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

The Company leases its main office facility in Sunnyvale, CA under a sublease agreement with the Parkinson's Institute that provide for month-to-month extensions by the Company. The Company does not own any real property. The Company currently pays \$600 per month for office space.

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The Company has entered into a rental agreement with the Pioneer Valley Life Sciences Institute to house research labs where the Company is currently conducting research on its lead therapeutic program MANF. The Company paid an annual fee of \$5,000 for the space being utilized and has the option to extend the lease on an annual basis on substantially the same terms at the end of the current lease in October 2013.

Item 3. Legal Proceedings.

Other than the matters outlined below, the Company is not currently involved in any litigation that it believes could have a material adverse effect on its financial condition or results of operations.

On January 6, 2012, the Company was served a summons regarding the filing of a lawsuit (Complaint for Breach of Contract, Specific Performance and Common Counts) against the Company by a former consultant to the Company, Peter Freeman v. Amaranthus Biosciences, Inc. In August 2012, the Company reached a settlement with Mr. Freeman whereby he will receive payment of \$44,000 in monthly installments of \$5,000 until fully paid.

Power3 Medical Products, Inc. (“Power3”) entered into a License Agreement with the Company on January 16, 2012 to, among other things, license the NuroPro diagnostic test for Parkinson’s disease to the Company (the “Agreement”). As part of the Agreement, the Company was granted an option to acquire certain intellectual property, and a right of first refusal to acquire certain intellectual property (collectively the “IP”). The Company recently discovered the Agreement was entered into at a time when Power3 may not have had the authority to enter into the Agreement.

On June 26, 2012, Amaranthus became aware of a previously undisclosed legal dispute between Power3 and NeoGenomics, Inc. (“NeoGenomics”) where certain intellectual property assets of Power3 were placed into receivership in September 2011, in the State of Texas as a result of an unpaid note to NeoGenomics. On June 15, 2012 Power3 filed for Chapter 7 bankruptcy. However, on June 7th, 2012, the receiver sold, among other things, Power3’s IP to NeoGenomics. Although this sale may be considered a preference in the Power3 Bankruptcy, at this time NeoGenomics may have title to certain intellectual property of Power3.

On April 12, 2012, the Company’s representatives appeared at bankruptcy related meeting of creditors of Power3. Ira Goldknopf, the President of Power3, testified for Power3. In the meeting it was discussed, among other things, that (i) Power3 had not transferred any of the Company’s stock, other than providing \$25,000 worth of the Company’s stock to its attorney; (ii) that another entity may own a portion of the IP; (iii) NeoGenomics was not a secured creditor when they credit bid their claim in the receivership; and (iv) the status of the license and ownership of the intellectual property is still in question.

In August 2012, the Company learned that the IP now belongs to the bankruptcy estate, and the Trustee has provided notice to the Patent and Trademark Office of the change in ownership. Further the Trustee was willing to work with Amaranthus with complying with Power 3's original agreement with Amaranthus, and put forth a proposal. In November 2012, the Company responded to the Trustee's proposal and is currently waiting for a formal reply from the Trustee.

On December 19, 2012, Amaranthus Bioscience, Inc. (the "Company" or "Registrant") entered into a bill of sale () with Lowell T. Cage, the chapter 7 trustee for Power3 pursuant to which Power3 granted to the Company interest in intellectual property relating to medical patents held by the estate of Power3, . Under the terms of the bill of sale, the Company will provide to Power3 consideration of \$40,000 plus the retention of the Company's common stock owned by Power3 in return for the intellectual property.

Amaranthus is continuing to review the Company's legal options with respect to the material misrepresentations made by the officers of Power3 and the Company's rights in the IP.

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On April 17, 2012, the Company was served a summons regarding the filing of a lawsuit (Complaint for Breach of Contract, Account Stated, and Reasonable Value) against the Company by Trinet HR, a former payroll services provider to the Company, *Trinet HR v. Amarnatus Biosciences, Inc.* The sough total payments in the amount of \$12,196 for services previously provided to the Company. The case has since settled with the Company paying Trinet \$14,000 in cash.

In July 2012, the Company became aware of the escalation of a patent dispute, in the form of a formal hearing with the European Union brought forth by Hermo Pharma, Oy (“Hermo”) based in Helsinki, Finland. Hermo had sought to invalidate the Company’s European composition of matter patents (“European Patents”) based upon what the Company believed to be frivolous grounds. At a hearing held November 6, 2012 the Opposition Division of the European Patent Office upheld the Company’s European Patents relating to neurotrophic factor MANF, following opposition by rival Hermo. The Opposition Division held that the Opponent’s arguments did not prejudice the maintenance of the European Patents as originally granted, with broad claims covering MANF and its derivatives. Hermo had not contested the validity of the European Patents on the basis of novelty or inventive step, but had objected to the broad scope of the claims. However, after due consideration of comprehensive legal and technical oral submissions from both sides, the Opposition Division rejected Hermo’s arguments and upheld the European Patents claims without restriction.

On August 8, 2012, the Company was served a summons regarding the filing of a lawsuit (Complaint for Breach of Contract) against the Company by On Assignment Staffing Services, Inc., a temporary staffing agency, for outstanding debts of \$36,414 allegedly due On Assignment Staffing Services, Inc. On April 3, 2013, the Company entered into a Settlement Agreement and Release with On Assignment pursuant to which the Company will pay On Assignment an aggregate of \$45,000 over a period of time and On Assignment will dismiss its suit against the Company.

On February 15, 2013, Amaranthus and Alpha Capital Anstalt (“Alpha”) entered into a Stipulation of Discontinuance with respect to Alpha Capital Anstalt v. Amaranthus Biosciences, Inc., N.Y. Supreme Ct., County of N.Y., Index No. 653962/2012 (the “Alpha Lawsuit”). The Stipulation of Discontinuance dismisses with prejudice the Alpha Lawsuit.

The Alpha Lawsuit concerned a claim by Alpha (contested by Amaranthus) that a certain note, dated October 4, 2011, in the principal amount of \$150,000, and due on April 1, 2012, which had been issued by Amaranthus to a third party and was purchased by Alpha, was in default. On February 15, 2013, Alpha executed a Satisfaction and Release whereby Alpha acknowledged full payment and satisfaction of the note in question, and expressly released Amaranthus from any further claims or liabilities under the loan. Amaranthus made the full payment in cash, and did not issue any common stock in connection with settlement of the suit.

Item 4. Mine Safety Disclosures.

Not applicable.

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PART II

Item 5. Market for Registrant’s Common Equity and Related Stockholder Matters and Issuer Purchases of Equity Securities.

The Company’s common stock is currently quoted on the OTCQB (“OTCQB”). The OTCQB is a network of security dealers who buy and sell stock. The dealers are connected by a computer network that provides information on current “bids” and “asks”, as well as volume information. The Company’s common stock is quoted on the OTCQB under the symbol “AMBS”.

There is no established public trading market for our securities with only periodic sporadic activity. There can be no assurance that a regular trading market will develop or if developed, may not be sustained. The following table sets forth, for the calendar periods indicated the range of the high and low last reported of the Company’s common stock, as reported by the OTCQB. The quotations represent inter-dealer prices without retail mark-ups, mark-downs or commissions, and may not necessarily represent actual transactions. The quotations may be rounded for presentation.

Period	High	Low
First Quarter 2012	\$0.15	\$0.05
Second Quarter 2012	\$0.13	\$0.012
Third Quarter 2012	\$0.02	\$0.004
Fourth Quarter 2012	\$0.11	\$0.0046

Period	High	Low
First Quarter 2011	\$0.14	\$0.05
Second Quarter 2011	\$1.50	\$0.006
Third Quarter 2011	\$1.04	\$0.06
Fourth Quarter 2011	\$0.50	\$0.07

As of April 12, 2013, Amarantus had shares of the Company’s common stock held by 64 shareholders of record.

Transfer Agent

The Company's registrar and transfer agent is VStock Transfer.

Dividend Policy

We have not previously paid any cash dividends on our Common Stock and do not anticipate or contemplate paying dividends on our Common Stock in the foreseeable future. We currently intend to utilize all available funds to develop our business. We can give no assurances that we will ever have excess funds available to pay dividends.

Recent Sales of Unregistered Securities

The following summaries are the securities transactions during the fiscal year ended December 31, 2012:

On January 4, 2012, the Company issued 450,000 shares of the Company's common stock to BeSpoke Growth Partners, Inc. for capital market public relations and business consulting services rendered in the amount of \$[]. 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.

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On January 20, 2012, the Company issued 273,333 shares of the Company's common stock to Seraphim Holdings, LLC for investor relations. 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 20, 2012, the Company issued 25,000 shares of the Company's common stock to Harry Pavilak for introductory services. 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 20, 2012, the Company issued 25,000 shares of the Company's common stock to Kent William Hodges II for introductory services. 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 24, 2012, the Company issued 373,500 shares of the Company's common stock to BeSpoke Growth Partners, Inc. for capital market public relations and business consulting services. 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 March 2, 2012, the Company issued 4,201,859 shares of the Company's common stock to Samuel Herschkowitz for consulting services. 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 March 13, 2012, the Company issued 50,000 shares of the Company's common stock to Ray Herrera for business consulting services. 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 March 13, 2012, the Company issued 121,079 shares of the Company's common stock to Rila Partners for technical advisory services. 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.

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On March 13, 2012, the Company issued 180,000 shares of the Company's common stock to Stuart Fine for investor relations. 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 March 13, 2012, the Company issued 3,571,428 shares of the Company's common stock to Power 3 Medical Products, Inc. for an exclusive license to certain technology. 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 March 13, 2012, the Company issued 357,143 shares of the Company's common stock to Steven Rash for transaction fee related to Power 3 Medical Products, Inc. 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.

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On March 13, 2012, the Company issued 1,500,000 shares of the Company's common stock to Hanover 1 Capital Corporation for investor relations. 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 March 13, 2012, the Company issued 500,000 shares of the Company's common stock to Robert Sullivan for marketing, public and investor relations services. 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 March 13, 2012, the Company issued 25,000 shares of the Company's common stock to Harry Pavilak for introductory services. 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 March 13, 2012, the Company issued 25,000 shares of the Company's common stock to Kent William Hodges II for introductory services. 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 March 13, 2012, the Company issued 201,277 shares of the Company's common stock to Robert Harris, a Board member, for payment of \$23,600 of fees due him. 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 March 13, 2012, the Company issued 162,979 shares of the Company's common stock to Arnold Grisham, a former Board member, for payment of \$19,150 of fees due him. 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 March 13, 2012, the Company issued 99,084 shares of the Company's common stock to AVS Communications, Inc. for payment of \$11,642.32 of fees due them. 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 March 13, 2012, the Company issued 125,347 shares of the Company's common stock to Conner Atchley for payment of \$3,760.42 for note conversion. 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 May 7, 2012, the Company issued 1,958,113 shares of the Company's common stock to Machiavelli Global Marketing for payment of \$39,326 for note conversion. 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 May 7, 2012, the Company issued 1,750,000 shares of the Company's common stock to Bespoke Growth Partners, Inc. for payment of \$128,125 for capital market public relations and business consulting services. 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.

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On May 7, 2012, the Company issued 1,250,000 shares of the Company's common stock to Scott VandeerMeer/Jeff Stephen's for payment of \$25,000 for note conversion. 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 May 7, 2012, the Company issued 225,000 shares of the Company's common stock to Seraphim Holdings, LLC for payment of \$22,500 for introductory services. 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 May 30, 2012, the Company issued 100,000 shares of the Company's common stock to R. Chris Cottone for payment of \$10,000 of fees due them. 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 June 1, 2012, the Company issued 300,000 shares of the Company's common stock to Larry Eastland for payment of \$12,000 for introductory services. 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 June 11, 2012, the Company issued 1,000,000 shares of the Company's common stock to R. Chris Cottone for payment of \$30,000 of fees due them. 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 June 11, 2012, the Company issued 2,500,000 shares of the Company's common stock to Green Tree Financial for payment of \$75,000 of fees due them. 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 June 11, 2012, the Company issued 2,000,000 shares of the Company's common stock to Bespoke Growth Partners, Inc. for payment of \$60,000 for capital market public relations and business consulting services. 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 June 22, 2012, the Company issued 1,191,584 shares of the Company's common stock to Magna Group for payment of \$9,830.57 for note conversion. 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 July 17, 2012, the Company issued 2,000,000 shares of the Company's common stock to Jeff Stephens for payment of \$14,000 for introductory services. 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 July 17, 2012, the Company issued 5,000,000 shares of the Company's common stock to Asher Enterprises, Inc for payment of \$12,000 for note conversion. 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.

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On August 21, 2012, the Company issued 4,285,714 shares of the Company's common stock to Asher Enterprises, Inc for payment of \$12,000 for note conversion. 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 August 31, 2012, the Company issued 1,777,779 shares of the Company's common stock to Asher Enterprises, Inc for payment of \$4266,67 for note conversion. 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 September 25, 2012, the Company issued 5,681,819 shares of the Company's common stock to Redwood Management LLC for payment of \$12,500 for note conversion. 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 September 27, 2012, the Company issued 4,750,000 shares of the Company's common stock to Blackbridge Capital, LLC for payment of \$9,500 for note conversion. 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 September 28, 2012, the Company issued 5,145,000 shares of the Company's common stock to Matt Morris for payment of \$10,804.50 for note conversion. 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 September 28, 2012, the Company issued 5,909,090 shares of the Company's common stock to Redwood Management LLC for payment of \$13,000 for note conversion. 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 October 2, 2012, the Company issued 300,000 shares of the Company's common stock to BeSpoke Growth Partners, Inc. for capital market public relations and business consulting services. 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.

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On October 3, 2012, the Company issued 2,045,454 shares of the Company's common stock to Redwood Management LLC for payment of \$4,500 for note conversion. 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 October 3, 2012, the Company issued 5,000,000 shares of the Company's common stock to Asher Enterprises Inc for payment of \$15,000 for note conversion. 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 October 4, 2012, the Company issued 7,668,692 shares of the Company's common stock to Bespoke Growth Partners, Inc. for payment of \$9,202.43 for capital market public relations and business consulting services. 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.

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On October 4, 2012, the Company issued 500,000 shares of the Company's common stock to Provsta Life Sciences for payment of \$32,500 for technology. 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 October 8, 2012, the Company issued 837,500 shares of the Company's common stock to Asher Enterprises Inc for payment of \$2,680 for note conversion. 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 October 9, 2012, the Company issued 1,250,000 shares of the Company's common stock to StockVest for payment of \$11,250 for services. 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 October 9, 2012, the Company issued 5,405,405 shares of the Company's common stock to Matt Morns for payment of \$10,000 for note conversion. 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 October 12, 2012, the Company issued 1,500,000 shares of the Company's common stock to JSBarkats PLLC for payment of \$7,500 for legal services. 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 October 16, 2012, the Company issued 6,818,181 shares of the Company's common stock to Redwood Management LLC for payment of \$15,000 for note conversion. 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 October 16, 2012, the Company issued 8,000,000 shares of the Company's common stock to Brian Holden for payment of \$16,000 for note conversion. 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.

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On October 17, 2012, the Company issued 4,943,244 shares of the Company's common stock to Matt Morris for payment of \$9,145 for note conversion. 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 October 22, 2012, the Company issued 8,695,652 shares of the Company's common stock to Redwood Management LLC for payment of \$20,000 for note conversion. 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 October 22, 2012, the Company issued 10,810,810 shares of the Company's common stock to Mathew Morris for payment of \$20,000 related to the conversion of a Convertible Promissory Note. 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.

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On October 26, 2012, the Company issued 10,000,000 shares of the Company's common stock to Neuroscience Associates for payment of \$68,000 related to technical services provided to the Company. 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 October 26, 2012, the Company issued 3,043,478 shares of the Company's common stock to Redwood Management LLC for payment of \$7,000 for note conversion. 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 October 29, 2012, the Company issued 1,000,000 shares of the Company's common stock to Joseph Rubinfeld for payment of \$10,000 related to the conversion of a Convertible Promissory Notes. 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 October 30, 2012, the Company issued 5,405,405 shares of the Company's common stock to Matt Morris for payment of \$10,000 for note conversion. 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 October 31, 2012, the Company issued 5,700,000 shares of the Company's common stock to Scott VanderMeer for payment of \$10,000 for note conversion. 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 October 31, 2012, the Company issued 2,000,000 shares of the Company's common stock to Brian Holden for payment of \$4,000 for note conversion. 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 November 1, 2012, the Company issued 2,000,000 shares of the Company's common stock to R. Chris Cottone for payment of \$12,000 for services. 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 November 2, 2012, the Company issued 5,000,000 shares of the Company's common stock to Jeff Stephens for payment of \$12,000 related to the conversion of a Convertible Promissory Notes 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 November 2, 2012, the Company issued 5,000,000 shares of the Company's common stock to Scott VanderMeer. for payment of \$12,000 related to the conversion of a Convertible Promissory Notes 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 November 2, 2012, the Company issued 7,000,000 shares of the Company's common stock to Ascendent Partners, LLC for payment of \$11,436.88 related to the conversion of a Convertible Promissory Note. 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.

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On November 9, 2012, the Company issued 750,000 shares of the Company's common stock to VStock Transfer, LLC for payment of \$6,750 related to transfer agent services. 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 November 10, 2012, the Company issued 500,000 shares of the Company's common stock to Scott VanderMeer for payment of \$5,000 related to a Convertible Promissory Note conversion. 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 November 10, 2012, the Company issued 264,063 shares of the Company's common stock to Sheryl Clark for payment of \$10,552.52 related to a Convertible Promissory Note conversion. 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 November 12, 2012, the Company issued 3,500,000 shares of the Company's common stock to Dustin Johns for payment of \$7,500 related to the conversion of a Convertible Promissory Notes. 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 November 19, 2012, the Company issued 23,000,000 shares of the Company's common stock to Ironridge Global IV, Ltd for payment of \$464,600 related to the conversion of some trade debt. 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 November 19, 2012, the Company issued 9,998,578 shares of the Company's common stock to Dominion Capital, LLC for payment of \$84,987.91 related to the conversion of a Convertible Promissory Note. 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 November 28, 2012, the Company issued 10,000,000 shares of the Company's common stock to Dominion Capital, LLC for payment of \$85,000 related to the conversion of a Convertible Promissory Note. 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 December 5, 2012, the Company issued 8,823,530 shares of the Company's common stock to Dominion Capital LLC for payment of \$75,000. related to the conversion of a Convertible Promissory Notes 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 December 6, 2012, the Company issued 3,962,679 shares of the Company's common stock to Ironridge Global IV, Ltd for payment of \$80,050.16 related to the conversion of some trade debt. 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.

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On December 10, 2012, the Company issued 1,240,165 shares of the Company's common stock to Ironridge Global IV, Ltd for payment of \$24,374.45 related to the conversion of some trade debt. 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 December 18, 2012, the Company issued 10,000,000 shares of the Company's common stock to Ascendent Partners, LLC for payment of \$30,000 related to the conversion of a Convertible Promissory Notes 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 December 21, 2012, the Company issued 1,732,282 shares of the Company's common stock to Hanover Holdings I, LLC for payment of \$22,575 related to the conversion of a Convertible Promissory Notes 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 December 26, 2012, the Company issued 9,333,876 shares of the Company's common stock to David Fiamingo. for payment of \$31,080.51 related to the conversion of Convertible Promissory Notes. 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.

Equity Compensation Plan Information

The Company's Board of Directors (the "Board") and its stockholders approved the 2008 Stock Plan (the "2008 Plan"). Under the Plan, the Board may grant up to 10,742,127 shares of incentive stock options, nonqualified stock options, or stock awards to eligible persons, including employees, nonemployees, members of the Board, consultants, and other independent advisors who provide services to the Company. In general, options are granted with an exercise price equal to the fair value of the underlying common stock on the date of the grant. Options generally have a contractual life of 10 years and vest over periods ranging from being fully vested as of the grant dates to four years.

Further, in July, 2012, our Board of Directors adopted a new stock plan, the Management, Employee, Advisor and Director Preferred Stock Option Plan – 2012 Series B Convertible Preferred Stock Plan. The purposes of this Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Management, Employees, Advisors and Directors and to promote the success of our business. Certain current and former Management, Employees, Advisors and Directors were awarded a total of 1,247,500 options to purchase Series B Preferred shares on July 15th, 2012, and an additional 1,200,000 options on November 4, 2012

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The following table shows information with respect this plan as of the fiscal year ended December 31, 2012.

Equity Compensation Plan Information (Common Stock)

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average Exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,673,797	\$0.0132	6,209,322
Equity compensation plans not approved by security holders	—	—	—
Total	1,673,797	\$0.0132	6,209,322

Equity Compensation Plan Information (Preferred Stock)

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average Exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	—	—	—
Equity compensation plans not approved by security holders	2,447,500	\$0.4500	52,500
Total	2,447,500	\$0.4500	52,500

Item 6. Selected Financial Data

Not applicable.

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Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

This report contains forward-looking statements. These forward-looking statements include, without limitation, statements containing the words “believes,” “anticipates,” “expects,” “intends,” “projects,” “will,” and other words of similar import or the negative of those terms or expressions. Forward-looking statements in this report include, but are not limited to, expectations of future levels of research and development spending, general and administrative spending, levels of capital expenditures and operating results, sufficiency of our capital resources, our intention to pursue and consummate strategic opportunities available to us, including sales of certain of our assets. Forward-looking statements subject to certain known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to those described in “Risk Factors” of the reports filed with the Securities and Exchange Commission.

The following discussion should be read in conjunction with our consolidated financial statements and notes thereto included elsewhere herein.

Overview

Amarantus Bioscience, Inc., a Delaware corporation (formerly Amaranthus Bioscience, Inc., Amaranthus Biosciences, Inc. and Jumpkicks, Inc., a Delaware corporation) (the “Company” or “Amarantus”), was founded in January 2008 and operates as a California-based development-stage biotechnology company. On May 25, 2011, the Company entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Amaranthus Therapeutics, Inc., a privately held Delaware corporation (“Amarantus”), and JKIK Acquisition Corp. (the “Acquisition Sub”), the Company’s former wholly-owned Delaware subsidiary. In connection with the closing of the merger transaction, Amaranthus merged with and into the Acquisition Sub on May 25, 2011 (the “Merger”).

On March 22, 2013, Amaranthus Bioscience, Inc., a Delaware corporation (“Amarantus Delaware”), filed with the Secretary of State of the State of Nevada Articles of Merger, pursuant to which Amaranthus Delaware merged with and into the Company, a Nevada corporation, and former wholly-owned subsidiary of Amaranthus Delaware (formed solely for the purpose of reincorporating in the State of Nevada). The Articles of Merger were filed pursuant to that certain Agreement and Plan of Merger, dated March 22, 2013, by and between Amaranthus Delaware and the Company (the “Merger Agreement”). Pursuant to the terms of the Merger Agreement and the Articles of Merger, the Company became the surviving corporation and Amaranthus Delaware ceased to exist.

On April 5, 2013, the Company (formerly known as Amaranthus Bioscience, Inc.) filed a Certificate of Amendment to its Articles of Incorporation with the Secretary of State of Nevada, pursuant to which the Company’s name was changed from Amaranthus Bioscience, Inc. to Amaranthus Bioscience Holdings, Inc.

The Company focuses on developing intellectual property and proprietary technology in order to develop product candidates to diagnose and treat human disease. The Company owns the intellectual property rights to a therapeutic protein known as Mesencephalic-Astrocyte-derived Neurotrophic Factor (“MANF”) and has a license to an Alzheimer’s diagnostic blood test known as LymPro. In addition, the Company owns intellectual property rights to a series of biomarkers related to the diagnosis of Parkinson’s disease and other neurodegenerative disorders known as NuroPro, markers related to the diagnosis of breast cancer and owns an inventory of 88 cell lines known as PhenoGuard, primarily utilized for the screening and discovery of biologic drug candidates and biomarkers of the central nervous system

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. The Company’s lead MANF product development effort is centered on a therapy for Parkinson’s disease.

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LymPro is a blood test that allows for the diagnosis of Alzheimer's disease, even in its earliest stages, based upon certain immunology based markers in the blood..BC-SeraPro is a blood test that allows for the detection of breast cancer in its earliest stages. NuroPro is a blood test that allows for the detection of neurodegenerative diseases, including Parkinson's, Alzheimer's and ALS in their earliest stages.

The Company also owns an inventory of 88 cell lines that Amaranthus refers to as PhenoGuard Cell Lines. MANF was the first therapeutic protein discovered from a PhenoGuard Cell Line. The Company believes that it may identify additional therapeutic proteins from the Company's inventory of PhenoGuard Cell Lines, and can use these cell lines to screen for activity of other drug candidates. As part of the PhenoGuard process, the Company also has the ability to run certain very specific assays related to central nervous system disorders that could aid in the drug discovery process.

Critical 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 period. 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.

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.

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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 amortized as revenue when the services are provided and the milestones are met. The Company received and recognized total research grant revenue of \$0 and \$188,308 in the years ended December 31, 2012 and 2011, respectively, as the Company incurred all of the qualifying expenses and all applicable milestones were met. See Note 5 to the financial statements for further information on the research grant revenue received and recognized to date. In addition, the company received and recognized \$0 and \$35,280 of contract revenue in years ended December 31, 2012 and 2011, respectively.

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.

The Company uses the Black-Scholes option-pricing model as the method for determining the estimated fair value of stock options.

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

Stock Warrants - Certain warrants to purchase the Company's stock are classified as liabilities in the 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 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).

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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 balance sheets for cash and cash equivalents, accounts payable, and accrued liabilities approximates their value due to the short-term maturities of such instruments.

Recently Issued Accounting Pronouncements

In May 2011, the FASB issued updated accounting guidance to amend existing requirements for fair value measurements and disclosures. The guidance expands the disclosure requirements around fair value measurements categorized in Level 3 of the fair value hierarchy and requires disclosure of the level in the fair value hierarchy of items that are not measured at fair value but whose fair value must be disclosed. It also clarifies and expands upon existing requirements for fair value measurements of financial assets and liabilities as well as instruments classified in shareholders' equity. The guidance is effective for annual and interim periods beginning after December 15, 2011. The implementation of this guidance is not expected to have a material impact on the Company's consolidated financial position, results of operations or cash flows.

In June 2011, the FASB issued guidance concerning the presentation of Comprehensive Income in the financial statements. Entities will have the option to present the total of comprehensive income, the components of net income and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate, but consecutive statements. The disclosure requirements are effective for annual and interim periods beginning after December 15, 2011 and should be retrospectively applied. The implementation of this

guidance is not expected to have any impact on the Company's consolidated financial position, results of operations or cash flows.

In September 2011, the FASB issued guidance on annual and interim goodwill impairment tests. An entity may now first assess qualitative factors to determine whether it is "more likely than not" that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test described in Topic 350, Intangibles-Goodwill and Other. The more-likely-than-not threshold is defined as having a likelihood of more than 50%. The new guidance is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. The implementation of this guidance is not expected to have a material impact on the Company's consolidated financial position, results of operations or cash flows.

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Results of Operations

For the Fiscal Year Ended December 31, 2012, Compared to the Fiscal Year Ended December 31, 2011

During the fiscal year ended December 31, 2012, we generated \$0 in revenue as compared to \$223,588 in revenues for the year end December 31, 2011. Operating expenses for the year end December 31, 2012 were \$4,090,342 as compared to \$3,963,645 for the year end December 31, 2011. Accordingly, this resulted in a loss from operations of \$4,090,342 for the year end December 31, 2012 as compared to a loss from operations of \$3,740,057 for the year end December 31, 2011. The change in revenue is the result of no new grants or contract service revenues in the year ended December 31, 2012. The change in operating expenses was attributable to increased fees for services and consultants expenses in the year ended December 31, 2012

Research and development costs for the year end December 31, 2012 were \$583,869 as compared to \$1,177,532 for the year end December 31, 2011. General and administrative costs for the year end December 31, 2012 were \$3,503,373 as compared to \$2,786,113 for the year end December 31, 2011.

For the year end December 31, 2012, we incurred interest expense of \$1,518,420 and other expenses totaling \$11,862 as compared to \$1,015,203 and \$128,977, respectively, for the year end December 31, 2011. The change in interest expense was attributable to the increased debt financing activity in the year ended December 31, 2012.

For the year end December 31, 2012, the change in fair value of warrants and derivatives liabilities was \$485,006 as compared to \$444,135, respectively, for the year end December 31, 2011.

Liquidity and Capital Resources

As of December 31, 2012, the Company had total current assets of \$676,794 consisting of \$157,174 in cash and cash equivalents and 519,620 in prepaid expenses and other current assets. As of December 31, 2012, the Company had current liabilities in the amount of \$4,737,753, consisting of:

Accounts payable	\$2,596,848
Accrued liabilities	\$150,049
Related party liabilities	\$222,083
Notes payable	\$740,000
Current portion of warrant liability	\$232,988

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Current portion of derivative liabilities	\$26,893
Current portion of convertible promissory notes	\$786,892

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As of December 31, 2012, Amaranthus had a working capital deficit in the amount of \$4,060,959.

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

	2012	2011
Net cash provided by (used in) operating activities	\$(1,154,726)	\$(2,815,514)
Net cash provided by (used in) investing activities	(56,000)	(4,688)
Net cash provided by (used in) financing activities	1,366,430	2,773,551
Net increase (decrease) in cash and cash equivalents	\$ 156,304	\$(46,651)

We incurred a net loss for the year ended December 31, 2012 of \$5,135,618 as compares to \$4,440,103 for the year ended December 31, 2011. This change is attributable to a decrease in net revenues of \$223,588, an increase in operating expenses of \$126,697 and an increase in interest and other income/expense of \$345,231.

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, above, and in Note 10 to our 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.

Going Concern

We are a development stage company engaged in biotechnology research and development. We have suffered recurring losses from operations since inception, and have generated negative cash flows from operations. For these reasons, our auditors have raised a substantial doubt about our ability to continue as a going concern. Our financial statements have been prepared assuming that we will continue as a going concern which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. We expect to incur further losses in the development of our business and have been dependent on funding operations through the issuance of convertible debt and private sale of equity securities. These conditions raise substantial doubt about our ability to continue as a going concern. Management's plans include continuing to finance operations through the private or public placement of debt and/or equity securities and the reduction of expenditures. However, no assurance can be given at this time as to whether we will be able to achieve these objectives. The financial statements do not include any adjustment relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

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Item 8. Financial Statements and Supplementary Data.

The financial statements are included herein commencing on page F-1.

Index to Financial Statements Required by Article 8 of Regulation S-X:

Audited Financial Statements:

F-1 Report of Independent Registered Public Accounting Firm;

F-2 Consolidated Balance Sheets as of December 31, 2012 and 2011;

F-3 Consolidated Statements of Operations for the years ended December 31, 2012 and 2101, and for the period from inception to December 31, 2012;

F-4 Consolidated Statements of Cash Flows for the years ended December 31, 2012 and 2011, and for the period from inception to December 31, 2012;

F-5 Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit) for the years ended December 31, 2012 and 2011, and the period from inception to December 31, 2012;

F-6 Notes to Financial Statements

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

Amarantus Bioscience Holdings, Inc.

Sunnyvale, California

We have audited the consolidated balance sheets of Amarantus Bioscience Holdings, Inc., a development stage company (the "Company"), as of December 31, 2012 and 2011, and the related consolidated statements of operations, stockholders' deficit, and cash flows for the years then ended, and for the period from January 14, 2008 (date of inception) to December 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Amarantus Bioscience Holdings, Inc. as of December 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended, and for the period from January 14, 2008 (date of inception) to December 31,

2012, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. The Company is a development stage company engaged in biotechnology research and development. The Company has suffered recurring losses from operations since inception, has a working capital deficit, and has generated negative cash flow from operations that raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are described in Note 2 to the financial statements. The financial statements do not include any adjustments that might result from the outcome of these uncertainties.

/s/ Silberstein Ungar, PLLC

Silberstein Ungar, PLLC

Bingham Farms, Michigan

April 16, 2013

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Table of Contents**Amarantus Bioscience Holdings, Inc.****(A development stage company)****Consolidated Balance Sheets**

	December 31,	
	2012	2011
Assets		
Current assets		
Cash and cash equivalents	\$ 157,174	\$ 870
Prepaid expenses and other current assets	519,620	335,498
Total current assets	676,794	336,368
Property and equipment, net	—	18,389
Other assets	533,143	—
Total assets	\$ 1,209,937	\$ 354,757
Liabilities, Convertible Preferred Stock and Stockholders' (Deficit)		
Current liabilities		
Accounts payable	\$ 2,596,848	\$ 2,052,764
Accrued liabilities	150,049	77,208
Related party liabilities	222,083	222,230
Notes payable	740,000	150,000
Current portion of warranty liability	232,988	281,143
Current portion of derivative liability	26,893	45,180
Current portion of convertible promissory notes	768,892	714,261
Total current liabilities	4,737,753	3,542,787
Stock warrants liability, net of current portion	—	2,788
Derivative liability, net of current portion	—	95,526
Convertible Promissory Notes — Net of current portion	—	63,600
Total liabilities	4,737,753	3,704,701
Commitments and contingencies		
Stockholders' (deficit)		
Convertible preferred stock, par value \$0.001 — 10,000,000 shares, authorized, 250,000 shares designated as Series A, par value \$0.001, 250,000 shares and -0- shares issued and outstanding as of December 31, 2012 and December 31, 2011, respectively,	250	—
2,500,000 shares designated as Series B par value \$0.001, -0- shares issued and outstanding as of December 31, 2012 and December 31, 2011, respectively	342,517	80,937

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Common stock, par value \$0.001 — 1,000,000,000 and 250,000,000 shares authorized at December 31, 2012 and 2011, respectively; 345,125,688 and 80,936,592 shares issued and outstanding at December 31, 2012 and 2011, respectively

Additional paid-in capital	7,991,465	3,295,549
Deficit accumulated during the development stage	(11,862,048)	(6,726,430)
Total stockholders' (deficit)	(3,527,816)	(3,349,944)
Total liabilities and stockholders' (deficit)	\$1,209,937	\$354,757

The accompanying notes are an integral part of these consolidated financial statements.

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Table of Contents**Amarantus Bioscience Holdings, Inc.****(A development stage company)****Consolidated Statements of Operations**

	Year Ended December 31,		Cumulative Period From January 14, 2008 (Date of Inception) to December 31, 2012
	2012	2011	
Net Revenues	\$—	\$223,588	\$415,996
Operating Expenses:			
Research and development	583,869	1,177,532	2,189,656
General and administrative	3,506,473	2,786,114	7,950,920
Total operating expenses	4,090,342	3,963,646	10,140,576
Loss from operations	(4,090,342)	(3,740,058)	(9,724,580)
Interest and Other Income (Expense)			
Interest expense	(1,518,420)	(1,015,203)	(2,729,566)
Other income (expense)	(11,862)	(128,977)	86,556
Change in fair value of warrants & derivatives liabilities	485,006	444,135	882,174
Total interest and other income (expense)	(1,045,276)	(700,045)	(1,760,866)
Net loss	\$(5,135,618)	\$(4,440,103)	\$(11,485,446)
Net loss per share attributable to common stockholders:			
Basic and fully diluted	\$(0.04)	\$(0.08)	
Weighted average number of shares used to compute net loss per share of common stock:			
Basic and fully diluted	140,710,454	52,691,358	

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents**Amarantus Bioscience Holdings, Inc.****(A development stage company)****Consolidated Statements of Cash Flows**

	Year Ended December 31,		Cumulative Period From January 14, 2006 (Date of Inception) to December 31, 2012
	2012	2011	2012
Cash flows from operating activities			
Net loss	\$(5,135,618)	\$(4,440,102)	\$(11,496,178)
Adjustments to reconcile net loss to net cash used in operating activities			
Depreciation and amortization	7,260	15,155	33,014
Amortization of debt discount	655,881	—	655,881
Amortization of financing costs	13,091	—	13,091
Stock issued for services	1,637,696	—	1,637,696
Loss on stock issuance	672,414	—	672,414
Gain on disposal of equipment	1,129	(3,750)	(2,621)
Stock-based compensation expense	383,604	656,252	1,065,031
Non-cash interest expense related to warrants and derivatives	—	642,646	763,316
Change in fair value of warrants and derivatives	(485,006)	(439,369)	(877,406)
Gain on settlement of convertible note and warrants	—	—	(137,632)
Changes in assets and liabilities			
Prepaid expenses and other current assets	(166,025)	(305,281)	(501,523)
Accounts payable	1,184,118	1,058,792	3,390,658
Accrued liabilities and other non-current liabilities	77,477	65,375	195,027
Related party liabilities	(147)	(65,232)	(143,787)
Net cash used in operating activities	(1,154,126)	(2,815,514)	(4,733,019)
Cash flows from investing activities			
Acquisition of property and equipment	—	(4,688)	(40,392)
Acquisition of property and equipment	(55,000)	—	(55,000)
Acquisition of property and equipment	(1,000)	—	(1,000)
Net cash provided by (used in) investing activities	(56,000)	(4,688)	(96,392)
Cash flows from financing activities			
Proceeds from borrowings	1,413,430	805,000	2,670,978
Repayment from borrowings	(47,000)	—	(147,000)
Proceeds from issuance of common stock	—	1,793,920	1,797,941

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Proceeds from issuance of stock options	—	200,818	200,818
Proceeds from issuance of convertible preferred stock,	—	—	540,000
Cost of financials	—	(26,187)	(76,187)
Proceeds from sale of warrant	—	—	35
Net cash provided by financing activities	1,366,430	2,773,551	4,986,585
Net increase (decrease) in cash and cash equivalents	156,304	(46,651)	157,174
Cash and cash equivalents, beginning of period	870	47,521	—
Cash and cash equivalents, end of period	\$ 157,174	\$ 870	\$ 157,174
Supplemental disclosure of noncash investing and financing activities			
Warrants issued to investors	—	—	371,180
Bifurcation of derivatives embedded in convertible notes	—	—	548,053
Preferred stock warrants reclassified from liabilities to equity	2,032	—	39,142
Preferred stock issued in lieu of payment of payable	250,000	—	250,000
Issuance of convertible notes in lieu of payment of payable	305,932	69,226	459,699
Issuance of convertible notes in lieu of payment interest	702	—	702
Stock issued for prepaid expenses	—	31,188	31,188
Payables forgiven for property and equipment	—	10,000	10,000
Stock issued to satisfy accounts payable	—	560,808	560,808
Stock issued for convertible debt	—	964,982	964,982
Intrinsic value of beneficial conversion feature	—	224,985	224,985
Reclassification of warrants to APIC	—	2,032	365,870
Stock issued to acquire other assets	—	477,143	365,870
Convertible notes issued accrued liabilities	—	4,636	365,870

The accompanying notes are an integral part of these consolidated financial statement

Table of Contents**Amarantus Bioscience Holdings, Inc.****(A Development Stage Company)****Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)****Period From January 14, 2008 (Date of Inception) to December 31, 2012****(In thousands, except share and per share amounts)**

	Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Deficit Accumulated during the Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
Balances as of January 14, 2008	—	\$—	—	\$—	\$—	\$—	\$—
Issuance of common stock in December 2006 at \$0.001 per share in exchange for cash or services	—	—	4,020,000	4,020	—	—	4,020
Sale of warrant to investor	—	—	—	—	35	—	35
Dividend to founder for assumption of debts	—	—	—	—	—	(356,870)	(365,870)
Net loss	—	—	—	—	—	(406,706)	(406,706)
Balances as of December 31, 2008	—	—	4,020,000	4,020	35	(772,576)	(768,521)
Net loss	—	—	—	—	—	(306,190)	(306,190)
Balances as of December 31, 2009	—	—	4,020,000	4,020	35	(1,078,766)	(1,074,711)
Issuance of Series 1 convertible preferred stock in May 2010 for cash at \$0.40 per share — net of issuance costs of \$50,000	1,250,000	450,000	—	—	—	—	450,000
Issuance of Series 1 convertible preferred stock in October 2010 in exchange for convertible promissory notes)	488,354	195,342	—	—	—	—	195,342
Issuance of Series 1 convertible preferred stock in November 2010 for cash at \$0.40 per share	100,000	40,000	—	—	—	—	40,000
Preferred stock warrants reclassified from liabilities expense	—	—	—	—	37,110	—	37,110

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Stock-based compensation expense	—	—	—	—	25,175	—	25,175
Net loss	—	—	—	—	—	(1,207,561)	(1,207,561)
Balances as of December 31, 2010	1,838,3547	\$685,342	4,020,000	\$4,020	\$62,320	\$(2,286,327)	\$(1,534,645)

The accompanying notes are an integral part of these consolidated financial statement

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Table of Contents**Amarantus Bioscience Holdings, Inc.**

(A development stage company)

Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)**Period From January 14, 2008 (Date of Inception) to December 31, 2012**

(In thousands, except share and per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Deficit Accumulated during the Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
Balances as of January 14, 2010	1,838,354	\$685,342	4,020,000	\$4,020	\$62,320	\$(2,286,327)	\$(1,534,645)
Preferred shares converted to common	(1,838,354)	(685,342)	1,838,354	1,838	683,504	—	—
Option exercises	—	—	1,469,338	1,469	181,893	—	181,893
Merger record ATI shares retired	—	—	(7,327,692)	(7,327)	—	—	(7,327)
Effect of reverse recapitalization merger	—	—	45,500,000	45,500	(33,487)	—	12,013
Merger issuance of stock and record shell common	—	—	21,500,000	21,500	—	—	21,500
Option exercise post merger	—	—	737,357	738	16,718	—	17,456
Issuance of common stock	—	—	13,199,235	13,199	1,754,535	—	1,767,734
Merger expenses	—	—	—	—	(26,186)	—	(26,186)
Stock-based compensation expense	—	—	—	—	656,252	—	656,252
Net loss	—	—	—	—	—	(4,440,103)	(4,440,103)
Balances as of December 31, 2011	—	—	80,936,592	80,937	3,295,549	(6,726,430)	(3,349,944)
Issuance of Preferred Stock for services	250,000	250	—	—	249,750	—	250,000
Issuance of common stock	—	—	261,580,339	261,580	4,062,562	—	4,324,142
Stock-based compensation	—	—	—	—	383,604	—	383,604

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expense							
Net loss	—	—	—	—	—	(5,135,618)	(5,135,618)
Balances as of December 31, 2012	250,000	\$250	342,516,931	\$342,517	\$7,991,465	\$(11,862,048)	\$(3,527,816)

The accompanying notes are an integral part of these consolidated financial statements

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Amarantus Bioscience Holdings, Inc.

NOTES TO FINANCIAL STATEMENTS

FOR THE YEARS ENDED DECEMBER 31, 2012 and 2011, and

for the period from January 14, 2008 (date of inception) to December 31, 2012

1. General

Amarantus Bioscience, Inc. (the “Company”) was incorporated on January 14, 2008 in the state of Delaware. The Company is a development stage biopharmaceutical drug development company dedicated to sourcing high-potential therapeutic platform technologies and aligning their development with complementary clinical-stage compounds to reduce overall enterprise risk. Through December 31, 2012, the Company has been primarily engaged in biotechnology research and development and raising capital.

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 December 31, 2012, as defined by the Financial Accounting Standard 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 markets; secure financing, develop a customer base; attract, retain and motivate qualified personnel; and develop strategic alliances. As of December 31, 2012, 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 and, in the longer term, revenue from product sales.

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP), which contemplate continuation of the Company as a going concern. As of December 31, 2012, the Company had cash and cash equivalents of \$157,174. During the year ended December 31, 2012, the Company incurred a net loss of \$5,135,618 and had negative cash flows from operating activities of \$3,865,565. In addition, the Company had an accumulated deficit of \$11,862,048 at December 31, 2012. The Company believes its current capital resources are not sufficient to support its operations. Management intends to continue its research efforts and to finance operations of the Company through debt or equity financings. Management plans to seek additional debt and/or equity financing for the Company through private or public offerings or through a business combination or strategic partnership. There can be no assurance that the Company will be successful in obtaining additional financing on favorable terms, or at all. These matters raise substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

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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 period. 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 December 31, 2011 and 2012, consisted of the following:

	Year Ended December 31, 20122011
Property and equipment	
Equipment	\$— \$34,851
Computer equipment	— 3,179
Furniture and fixtures	— 2,363
Total property and equipment	— 40,393
Less accumulated depreciation	— 22,004
Property and equipment - net	\$— \$18,389

Depreciation expense for the years ended December 31, 2012 and 2011 and for the period from January 14, 2008 (date of inception) to December 31, 2012 was \$7,260, \$15,155, and \$33,014, respectively.

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The Company disposed of all of its furniture and equipment and a loss of \$1,129 was recorded in 2012.

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 amortized as revenue when the services are provided and the milestones are met. The Company received and recognized total research grant revenue of \$0, \$223,588 and \$415,996 for the years ended December 31, 2012 and 2011 and for the period from January 14, 2008 (date of inception) to December 31, 2012, respectively, as the Company incurred all of the qualifying expenses and all applicable milestones were met See Note 5 to the financial statements for further information on the research grant revenue received and recognized to date There was no revenue in 2012.

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.

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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.

Stock Warrants - Certain warrants to purchase the Company's stock are classified as liabilities in the 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 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 balance sheets for cash and cash equivalents, accounts payable, and accrued liabilities approximates their value due to the short-term maturities of such instruments.

Net income (loss) per share attributable to Amaratus 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 period, zero incremental shares were included for diluted earnings per share because the effect would be anti-dilutive .

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.

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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. AGREEMENT AND PLAN OF MERGER

On May 25, 2011, the Company entered into an Agreement and Plan of Merger (the Merger Agreement") with Amaranthus Therapeutics, Inc., a privately held Delaware corporation (Amaranthus"), and JKIK Acquisition Corp. (Acquisition Sub"), our newly formed wholly-owned Delaware subsidiary. In connection with the closing of this merger transaction, Amaranthus merged with and into Acquisition Sub (the Merger") on May 25, 2011, with the filing of articles of merger with the Delaware Secretary of State.

In addition, pursuant to the terms and conditions of the Merger Agreement:

- Each share of Amaranthus common stock and each share of Amaranthus preferred stock issued and outstanding immediately prior to the closing of the Merger was converted into the right to receive a pro-rata portion of a total of 1,820,000 shares of our common stock. As a result, the shareholders of Amaranthus received 1,820,000 newly issued shares of our common stock.
- Our board of directors was reconstituted to consist of Martin D. Cleary, Chairman, together with Dr. John W. Commissiong, Gerald E. Commissiong, Arnold T. Grisham, Robert L. Harris, and Eugene Mancino, who prior to the Merger were the directors of Amaranthus.
- Our sole officer and director immediately prior to the Merger, Richard Douglas, resigned from the board and from all offices.
- Our board appointed Martin D. Cleary as our Chief Executive Officer, Dr. John Commissiong as our Chief Scientific Officer, Gerald E. Commissiong as our Chief Operating Officer, and Marc E. Faerber as our Chief Financial Officer, Treasurer, and Secretary.
- In connection with the Merger, our former sole officer and director immediately prior to the Merger, Richard Douglas, received a transfer of all assets and agreed to assume all liabilities related to our pre-merger business.
- Following the closing of the merger, Mr. Douglas canceled and returned all 10,000,000 shares of his common stock.
- Following the closing of the merger, in a separate transaction, we authorized a forward split of 25 shares for each share of our common stock issued and outstanding at the time of the split.

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- Following the closing of the merger, our board of directors and shareholders approved a change in the name of the company to Amaranthus Bioscience, Inc.”
- As a result, following these events, there were 67,000,000 shares of our common stock issued and outstanding.
- In connection with the Merger, we adopted Amaranthus’ 2008 Stock Plan and confirmed all options issued thereunder. In addition, we adopted and assumed certain convertible notes and warrants issued by Amaranthus prior to the Merger.
- Amaranthus provided customary representations and warranties and complied with standard closing conditions, including approval of the Merger by its voting stockholders.

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Expenses incurred with the merger were \$26,186 and have been recorded as part of Stockholders' Equity.

The Merger is being accounted for as a reverse recapitalization. Reverse recapitalization accounting applies when a non-operating public shell company (Jumpkicks) acquires a private operating company (Amarantus) and the owners and management of the private operating company have actual or effective voting and operating control of the combined company. A reverse recapitalization is equivalent to the issuance of stock by the private operating company for the net monetary assets of the public shell corporation accompanied by a recapitalization with accounting similar to that resulting from a reverse acquisition, except that no goodwill or other intangible assets are recorded. In the Merger transaction, Jumpkicks qualifies as a non-operating public shell company because all pre-merger business assets and liabilities were transferred to and assumed by the sole officer and director of Jumpkicks, prior to the completion of the Merger. The reverse recapitalization accounting is attributable to a long-held position of the staff of the Securities and Exchange Commission as the acquisition of a non-operating public shell company does not qualify as a business for business combination purposes, as described in Accounting Standards Codification Topic 805, Business Combinations.

Complete information regarding the merger was included in our Form 8K/A filed on June 3, 2011.

5. MICHAEL J. FOX FOUNDATION GRANT

In April 2010, the Company was awarded a grant from the Michael J. Fox Foundation for Parkinson's Research ("MJFF"). Pursuant to the MJFF grant, the Company performed research related to comparison and analysis of certain genes in rodent models of Parkinson's disease. The grant provided for the reimbursement of expenses as incurred up to a maximum of \$370,716, payable in two installments with targeted payments in April 2010 and October 2010, and it established two milestones.. During the fiscal year ended December 30, 2011, the Company achieved certain milestones and received final payment and recorded revenue of \$178,308.

6. 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, 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.

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The Company's financial assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2012 and 2011, by level within the fair value hierarchy, are as follows:

Fair Value Measurements at December 31, 2012

	Level 1	Level 2	Level 3	Level 4
Warrant liability	\$ —	\$ —	\$232,988	\$232,988
Derivative Liability	—	—	26,893	26,893
Total property and equipment	\$ —	\$ —	\$259,881	\$259,881

Fair Value Measurements at December 31, 2011

	Level 1	Level 2	Level 3	Level 4
Warrant liability	\$ —	\$ —	\$283,931	\$283,931
Derivative Liability	—	—	140,706	140,706
Total property and equipment	\$ —	\$ —	\$424,637	\$424,637

The following table provides a summary of changes in the fair value of the Company's Level 3 financial liability mentioned above for the period from January 14, 2008 (date of inception) to December 31, 2012, and for the years ended December 31, 2011 and 2012:

	Warranty Liability	Derivative Liability	Total
January 14, 2008 (date of inception)	\$—	\$—	\$—
Issuance of warrants	52,665	—	52,665
Issuance of convertible notes	—	9,377	9,377
Change in fair value	(15,960	) (4,402	) (20,362)
December 31, 2008	36,705	4,975	41,680
Change 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 convertible notes	—	281,466	281,466
Reclassification of warrants to equity	(37,110	) —	(37,110)
Cancellation of warrants	(65,082	) —	(65,082)
Change 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

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Issuance of convertible notes	—	257,210	257,210
Change 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
Change in fair value	(48,912	) (4,158,162	) (4,207,074)
December 31, 2012	\$232,988	\$26,893	\$259,881

The valuation of the convertible preferred stock warrant liability is discussed in Note 11.

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7. Net income (loss) per share

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

	Year Ended December 31,	
	2012	2011
Numerator		
Net Loss	\$(5,135,618)	\$(4,440,103)
Denominator		
Weighted average shares outstanding during the period:		
Common stock - basic	140,710,454	52,691,358
Common shares equivalents	—	—
Common stock - diluted	140,710,454	52,691,358
Net loss per share	\$(0.04)	\$(0.08)

8. Accrued Liabilities

Accrued liabilities at December 31, 2012 and 2011, consisted of the following:

	Year Ended	
	December 31,	
	2012	2011
Accrued compensation and related benefits	\$18,746	\$18,746
Accrued interest	131,303	\$58,462
Total	\$150,049	\$77,208

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9. Convertible Promissory Notes and derivative liability

The Company owes 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		
\$ 25,000	4-11-11	4-08-13		
\$ 35,000	4-15-11	4-15-13	35,000	06-11-12
\$ 10,000	4-22-11	4-22-13	10,000	05-31-12
\$ 50,000	4-27-11	4-27-13		
\$ 10,000	04-08-11	4-08-13	10,000	

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 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 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 30th, 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.

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:

Principal Amount	Issue Date	Maturity Date	
\$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.

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We are currently party to a Sponsored Research Agreement (“SRA”) with MMRI under which we are provided office and laboratory space, use of research equipment, and other items within MMRI’s research facility in exchange for a monthly Sponsor Research Fee. The notes detailed above, in conjunction with certain warrants to purchase stock, were issued in payment of 50% of the respective monthly fees due under this agreement. In September 2012 we terminated our SRA and entered into a month to month Storage Agreement which provides storage for the frozen cell lines.

In addition, we owe the principal sum of \$12,240 to The Parkinson’s Institute, which was issued a Convertible Promissory Note under the terms of a Note and Warrant Purchase Agreement dated August 25, 2010. This note bears 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 of August 25, 2012. Principal and unpaid accrued interest due under this note shall be automatically converted 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. In addition the note holder has warrant coverage equal to 5% of the note principal with a warrant exercise price equal to the next equity financing per share price, and expiration seven years from the date of the note. In June 2012, \$12,240 of the note principal plus accrued interest was assigned to a new investor. Along with this assignment the warrants associated with these notes have been cancelled.

In June, 2012, we entered into a convertible note agreement with an investor for a principal amount of \$39,831. 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 represents the assignment of the Parkinson’s and MMRI notes discussed earlier. In June 2012 the note holder converted \$9,831 into common stock. In August 2012 the note holder assigned their remaining balance, \$30,000, plus accrued interest to a new note holder.

Also, in June 2012, we entered into a convertible note agreement with an investor for a principal amount of \$21,500. This note bears an interest rate of 12% per annum and has a maturity date of January 6, 2013. The note holder has the option to convert the note into common stock at any time, conversion at 55% of the average of the three lowest trading prices over the prior ten trading days from the date of conversion. We have the option to prepay note at any time in the amount of 150% of the principal and unpaid accrued interest within the first ninety days. Also in December, 2012, the note holder converted \$21,500 of the principal into common shares of the Company.

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 November, 2012, the note holder converted \$5,000 of the principal into common shares of the Company.

In September, 2012, we entered into a two separate convertible note agreement with an investor for a principal amounts of \$30,000 and \$42,000, both the result of prior issued note assignments. These notes bear an interest rate of 12% per annum, and have a maturity date of September 14, 2013 and September 27, 2013, respectively. The note holder has the option to convert the notes into common stock at any time, conversion at 50% of the lowest trading price over the prior twenty trading days from the date of conversion. We have the option to prepay the note at any time in the amount of 125% of the principal and unpaid accrued interest. Also in September and October, 2012, the note holder converted all of the \$30,000 note principal, and all of the \$42,000 note principal into common shares of the Company.

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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:

Principal	Amount	Issue Date	Maturity Date	Assigned
\$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	
\$100,000		4-13-11	12-6-11	
\$25,000		4-13-11	12-6-11	
\$25,000		5-13-11	12-6-11	
\$50,000		5-16-11	12-6-11	
\$25,000		5-10-11	12-6-11	
\$25,000		5-24-11	12-6-11	
\$31,250		6-7-11	12-6-11	
\$31,250		6-3-11	12-6-11	

Principal and interest, accrued at the rate of 5% per annum, are 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 and Exchange Act of 1934. 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, but not to be less than \$0.60 per share. The warrants expire five years from the date of the next equity financing closing. We are currently in default on these notes. See footnote 9 Commitments and Contingencies for further information.

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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, 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 \$0.10 or \$0.20 per share. In addition, the Company issued warrants to the note holders to purchase a number of shares of capital 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. During the year ended December 31, 2012, \$57,000 of these convertible notes converted to Company Common shares and another \$30,000 was assigned to another note holder in September 2012.

Principal Amount	Issue Date	Maturity Date	Converted to Equity	Assigned	Assigned or Conversion Date
\$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			
\$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, 2012 through December, 2012, the Company issued convertible promissory notes to various investors for aggregate proceeds of \$485,875. 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 \$0.01 or \$0.165 per share.

Principal Amount	Issue Date	Maturity Date	Converted to Equity	Conversion Date
\$5,000	12-30-11	6-27-12	\$5,000	February 2012
\$3,638	1-5-12	1-4-13	\$3,638	November 2012
\$100,000	1-17-12	7-15-12	\$100,000	December 2012
\$7,800	2-8-12	2-7-13	\$7,800	November 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
\$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	10-9-12	NA	\$5,000	October 2012
\$4,000	10-12-12	NA	\$4,000	October 2012
\$19,900	10-26-12	4-24-13		
\$10,000	10-29-12	4-27-13	\$10,000	October 2012
\$10,000	11-2-12	5-1-13	\$10,000	December 2012
\$11,437	10-30-12	10-30-13	\$11,437	November 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		
\$50,000	11-7-12	5-6-13	\$50,000	November 2012
\$10,000	11-8-12	NA	\$10,000	November 2012
\$20,000	11-8-12	5-7-13		
\$5,000	11-8-12	NA	\$5,000	December 2012
\$6,000	11-13-12	5-12-13		
\$350	11-13-12	NA		
\$20,000	11-14-12	NA		
\$13,000	11-19-12	5-18-13		

In March, 2012, \$9,500 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 \$10,000. The ROI has a redemption value of \$10,500 due on demand and the convertible promissory note is for \$9,500, non-interest bearing, due September 20, 2012, 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 dates from the date of conversion notice. In September 2012 the convertible note converted to common stock.

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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 \$6,672.44 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 dates from the date of conversion notice.

During the period January, 2012 through December, 2012, the Company issued two convertible promissory notes to one investor totaling \$39,325 Principal and interest on these convertible notes accrued at the rate of 12% per annum. The holder of the note can convert the note to common shares of the Company at any at 50% of lowest trading bid price for prior twenty trading days before conversion. Both notes were converted on the same day as the issuance date.

Principal Amount	Issue Date	Maturity Date	Converted to Equity	Conversion Date
\$ 15,000	3-9-12	10-27-12	\$ 15,000	March 2012
\$ 24,325	5-4-12	11-4-12	\$ 24,325	May 2012

During the period January, 2012 through December, 2012, the Company issued four convertible promissory notes to one investor totaling \$91,500. Principal and interest on these convertible notes accrue at the rate of 8% per annum. The holder of the note can convert the note to common shares of the Company any time after the initial 180 days of the note at a conversion price that is a percentage of an average of the market low over for a certain number days over a greater number of prior number of trading days from the date of notice to convert. The holder converted \$60,500 and was repaid \$37,000

Principal Amount	Issue Date	Maturity Date	Converted to Equity	Repaid Conversion Repayment Date
\$37,500	2-7-12	10-27-12	\$24,000	August 2012
			\$2,767	September 2012
			\$10,733	October 2012
\$17,000	3/19/12	12-21-12	\$17,000	October 2012
\$13,000	5/3/12	2-7-13		\$13,000 November 2012
\$24,000	6/13/12	3-15-13		\$24,000 December 2012

In January, 2012, a vendor converted their trade account to convertible promissory notes for the amount due them at the time of the note plus future billings, amounting to \$244,988. These notes accrue interest at 8.5% and have the option to convert to common stock at any time by the note holder, at a conversion price of \$0.11 per share. These notes were payable upon demand. In November, 2012 the holder assigned the notes.

In October 2012, a vendor converted their trade account to convertible promissory notes for the amount due them at the time of \$20,000. In October, 2012 the holder converted the notes.

On November 14, 2012 the Company entered into a Securities Purchase agreement with Dominion Capital LLC and signed a 10% Convertible promissory Note in the principal amount of \$600,000. This amount is repayable in 4 equal weekly installments of \$165,000 (\$150,000 principal and \$15,000 interest) commencing May 14, 2013.

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The following notes were assigned between parties:

Principal Amount	Issue Date	Maturity Date	Converted to Equity	Conversion Date
\$9,202	10-2-12	NA	\$9,202	December 2012
\$10,000	10-18-12	NA	\$10,000	October 2012
\$40,000	10-24-12	NA	\$30,000	Oct & Nov 2012
\$10,172	11-4-12	5-3-13	\$	
\$43,000	12-12-12	Demand		

Prior year notes converted:

Principal Amount	Issue Date	Maturity Date	Converted to Equity	Conversion Date
5,000	10-27-11	4-24-12	\$5,000	March 2012
30,000	11-30-11	5-28-12	\$30,000	March 2012
10,000	12-8-11	6-5-12	\$10,000	March 2012
5,000	12-14-11	6-11-12	\$5,000	March 2012

A number of 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 using the expected IRR 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 December 31, 2012 and December 31, 2011, the fair value of the derivative liability was \$26,893 and \$140,706, respectively. The changes in fair value for the twelve month periods ended December 31, 2012 and December 31, 2011 and the period from January 14, 2008 (date of inception) to December 31, 2012 of \$2,157,697, \$404,051, and \$404,347, respectively, has been recorded in the accompanying statements of operations as a component of other income (expense).

At December 31, 2012, total future minimum payments under the Convertible Notes are as follows:

2013	\$819,359
Less Debt discounts resulting from warrant and derivative liabilities	(50,467)
Net minimum payments	\$768,892

As of December 31, 2012 and December 31, 2011, the fair value of the derivative liability was \$26,893 and \$140,706, respectively. The changes in fair value for the twelve month periods ended December 31, 2012 and December 31, 2011 and the period from January 14, 2008 (date of inception) to December 31, 2012 of \$113,813, \$404,051, and \$518,160, respectively, have been recorded in the accompanying statements of operations as a component of other income (expense).

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10. 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 years ended December 31, 2012 and 2011, and for the period from January 14, 2008 (date of inception) to December 31, 2012, were \$33,596, \$114,161, and \$267,188, respectively.

Effective November 1, 2011 the Company entered into a consulting agreement where the consultant is to receive a stock option for common stock of 500,000 shares, fully vested, to be priced upon the Board of Directors approving such grant.

Contingencies — From time to time, the Company may become involved in litigation. On January 6, 2012 the Company was served a summons regarding the filing of a lawsuit (Complaint for Breach of Contract, Specific Performance and Common Counts) against the Company by a former consultant to the Company, Peter Freeman v. Amaranthus Bioscience, Inc. The Company intends to defend ourselves vigorously. The Company is unable to predict the likelihood of an unfavorable outcome or estimate its potential liability, if any, and no provision has been made in its financial statements for this matter.

In addition the Company is in default on payment of certain Convertible Notes that were due as of December 6, 2011 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	\$216,000

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 16, including a reference to contingent obligations reflected in the financial statements.

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11. CONVERTIBLE PREFERRED STOCK

The holders of the Series 1 convertible preferred stock (“preferred stock”) had various rights and preferences as follows:

Voting Rights — Each share of preferred stock has voting rights equivalent to the number of shares of common stock into which it is convertible.

Conversion — Each share of preferred stock is convertible by the holder at any time into shares of common stock (subject to adjustment for events of dilution, as defined) at a conversion rate of \$0.40 per share. The preferred stock shall automatically be converted into common stock upon the earlier of: (i) an initial public offering pursuant to an effective registration statement filed under the Securities Act of 1933, as amended, covering the offer and sale of the Company’s common stock or (ii) the prior written approval of the holders representing a majority of the outstanding shares of preferred stock, voting as a single class and on an as-converted basis.

Dividends — The holders of the preferred stock are entitled to receive noncumulative dividends, if and when declared by the Board of Directors. No dividends had been declared through December 31, 2012.

Liquidation — In the event of any liquidation, dissolution, or winding-up of the Company, the holders of the preferred stock shall be entitled to receive, prior and in preference to any distribution to the holders of common stock, their respective liquidation amounts. “Liquidation amount” shall mean the original issuance price of a particular share of preferred stock, plus any dividends declared but unpaid thereon. The original per share issuance price of Series 1 preferred stock is \$0.40, subject to adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization. If, upon such liquidation, dissolution, or winding-up of the Company the assets available for distribution to the stockholders shall be insufficient to pay the holders of shares of preferred stock the full liquidation amounts, the holders of preferred stock shall share ratably in any distribution of the assets in proportion to their respective liquidation amounts. After the payment to the holders of preferred stock of their full liquidation amount, any remaining assets were distributed to the holders of common stock in proportion to the number of shares owned by each such stockholder.

Stock Warrants — In 2008, the Company issued warrants resulting in the right to purchase 193,750 shares of Series 1 preferred stock at an exercise price of \$0.40 per share to various investors (See Note 6), and recorded the fair value of the warrants at \$52,665 at the time of issuance. The warrants were valued using the Black-Scholes option-valuation model with the following assumptions: contractual life of 7 years, volatility of 83.5% to 85.4%, risk-free interest rate of 2.8% to 3.6%, and no expected dividends.

In 2010, the Company issued warrants to various investors to purchase shares of the Company's equity securities in the Next Equity Financing at an exercise price equal to the price per share received from investors of the Next Equity Financing, and recorded the fair value of the warrants at \$3,680 at the time of issuance. The warrants were valued using the Black-Scholes option-valuation model with the following assumptions: contractual life of 7 years, volatility of 84.2% to 84.9%, risk-free interest rate of 1.9% to 2.0%, and no expected dividends.

In 2011, the Company issued warrants to various investors to purchase shares of the Company's equity securities in the Next Equity Financing at an exercise price equal to the price per share received from investors of the Next Equity Financing or at a specified exercise price of \$0.10-\$0.20 per share, and recorded the fair value of the warrants at \$314,835 at the time of issuance. The warrants were valued using the Black-Scholes option-valuation model with the following assumptions: contractual life of 1 to 7 years, volatility of 62.7% to 77.8%, risk-free interest rate of 0.9% to 2.9%, and no expected dividends.

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In July, 2012, our Board of Directors adopted a new stock plan, the Management, Employee, Advisor and Director Preferred Stock Option Plan – 2012 Series B Convertible Preferred Stock Plan. The purposes of this Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Management, Employees, Advisors and Directors and to promote the success of our business. Certain current and former Management, Employees, Advisors and Directors were awarded a total of 1,247,500 options to purchase Series B Preferred shares on July 15, 2012, and an additional 1,200,000 options on November 4, 2012. These options currently vest over four years and cannot be converted into common or sold for two years from the date of the Designation of the Series B Preferred shares. Each share of the Series B Preferred stock converts into fifty shares of common stock.

As of December 31, 2012 and 2011, the fair value of the warrant liability was \$232,990 and \$283,931, respectively. The changes in fair value for the years ended December 31, 2012 and 2011 and the period from January 14, 2008 (date of inception) to December 31, 2012 of \$48,9114, \$35,319 and \$33,966, respectively, have been recorded in the accompanying statements of operations as a component of other income (expense). The fair value of the warrants at December 31, 2012 and 2011 were determined using the Black-Scholes model with the following assumptions:

	2012	2011
Annualized volatility	275% - 624%	62.7% - 86.3%
Contractual life (years)	.5	.06 - 6.3
Expected dividends	0	% 0 %
Risk-free investment rate	0.12 - .014%	0.1% - 1.5%

None of the stock warrants have been exercised as of December 31, 2012.

12. COMMON STOCK

The Company's Certificate of Incorporation, as amended, authorize the Company to issue 1,000,000,000 shares of \$0.001 par value common stock. Common stockholders are entitled to dividends when and if declared by the Board of Directors. The holder of each share of common stock is entitled to one vote. As of December 31 2012, no dividends had been declared.

Common stock that the Company had reserved for issuance at December 31, 2012, is as follows:

Exercise and conversion of common stock warrants	1,743,056
Stock options outstanding	1,673,797
Stock options available for future grants under the 2010 Stock Plan	1,535,876

Total

4,952,729

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The following summaries are the securities transactions during the fiscal year ended December 31, 2012:

On January 4, 2012, the Company issued 450,000 shares of the Company's common stock to BeSpoke Growth Partners, Inc. for capital market public relations and business consulting services rendered.

On January 20, 2012, the Company issued 273,333 shares of the Company's common stock to Seraphim Holdings, LLC for investor relations.

On January 20, 2012, the Company issued 25,000 shares of the Company's common stock to Harry Pavilak for introductory services.

On January 20, 2012, the Company issued 25,000 shares of the Company's common stock to Kent William Hodges II for introductory services.

On January 24, 2012, the Company issued 373,500 shares of the Company's common stock to BeSpoke Growth Partners, Inc. for capital market public relations and business consulting services.

On March 2, 2012, the Company issued 4,201,859 shares of the Company's common stock to Samuel Herschkowitz for consulting services.

On March 13, 2012, the Company issued 50,000 shares of the Company's common stock to Ray Herrera for business consulting services.

On March 13, 2012, the Company issued 121,079 shares of the Company's common stock to Rila Partners for technical advisory services.

On March 13, 2012, the Company issued 180,000 shares of the Company's common stock to Stuart Fine for investor relations.

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On March 13, 2012, the Company issued 3,571,428 shares of the Company's common stock to Power 3 Medical Products, Inc. for an exclusive license to certain technology.

On March 13, 2012, the Company issued 357,143 shares of the Company's common stock to Steven Rash for transaction fee related to Power 3 Medical Products, Inc.

On March 13, 2012, the Company issued 1,500,000 shares of the Company's common stock to Hanover 1 Capital Corporation for investor relations.

On March 13, 2012, the Company issued 500,000 shares of the Company's common stock to Robert Sullivan for marketing, public and investor relations services.

On March 13, 2012, the Company issued 25,000 shares of the Company's common stock to Harry Pavilak for introductory services.

On March 13, 2012, the Company issued 25,000 shares of the Company's common stock to Kent William Hodges II for introductory services.

On March 13, 2012, the Company issued 201,277 shares of the Company's common stock to Robert Harris, a Board member, for payment of \$23,600 of fees due him.

On March 13, 2012, the Company issued 162,979 shares of the Company's common stock to Arnold Grisham, a former Board member, for payment of \$19,150 of fees due him.

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On March 13, 2012, the Company issued 99,084 shares of the Company's common stock to AVS Communications, Inc. for payment of \$11,642.32 of fees due them.

On March 13, 2012, the Company issued 125,347 shares of the Company's common stock to Conner Atchley for payment of \$3,760.42 for note conversion.

On May 7, 2012, the Company issued 1,958,113 shares of the Company's common stock to Machiavelli Global Marketing for payment of \$39,326 for note conversion.

On May 7, 2012, the Company issued 1,750,000 shares of the Company's common stock to Bespoke Growth Partners, Inc. for payment of \$128,125 for capital market public relations and business consulting services.

On May 7, 2012, the Company issued 1,250,000 shares of the Company's common stock to Scott VandeerMeer/Jeff Stephen's for payment of \$25,000 for note conversion.

On May 7, 2012, the Company issued 225,000 shares of the Company's common stock to Seraphim Holdings, LLC for payment of \$22,500 for introductory services.

On May 30, 2012, the Company issued 100,000 shares of the Company's common stock to R. Chris Cottone for payment of \$10,000 of fees due them.

On June 1, 2012, the Company issued 300,000 shares of the Company's common stock to Larry Eastland for payment of \$12,000 for introductory services.

On June 11, 2012, the Company issued 1,000,000 shares of the Company's common stock to R. Chris Cottone for payment of \$30,000 of fees due them.

On June 11, 2012, the Company issued 2,500,000 shares of the Company's common stock to Green Tree Financial for payment of \$75,000 of fees due them.

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On June 11, 2012, the Company issued 2,000,000 shares of the Company's common stock to Bespoke Growth Partners, Inc. for payment of \$60,000 for capital market public relations and business consulting services.

On June 22, 2012, the Company issued 1,191,584 shares of the Company's common stock to Magna Group for payment of \$9,830.57 for note conversion.

On July 17, 2012, the Company issued 2,000,000 shares of the Company's common stock to Jeff Stephens for payment of \$14,000 for introductory services.

On July 17, 2012, the Company issued 5,000,000 shares of the Company's common stock to Asher Enterprises, Inc for payment of \$12,000 for note conversion.

On August 21, 2012, the Company issued 4,285,714 shares of the Company's common stock to Asher Enterprises, Inc for payment of \$12,000 for note conversion.

On August 31, 2012, the Company issued 1,777,779 shares of the Company's common stock to Asher Enterprises, Inc for payment of \$4266.67 for note conversion.

On September 25, 2012, the Company issued 5,681,819 shares of the Company's common stock to Redwood Management LLC for payment of \$12,500 for note conversion.

On September 27, 2012, the Company issued 4,750,000 shares of the Company's common stock to Blackbridge Capital, LLC for payment of \$9,500 for note conversion.

On September 28, 2012, the Company issued 5,145,000 shares of the Company's common stock to Matt Morris for payment of \$10,804.50 for note conversion.

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On September 28, 2012, the Company issued 5,909,090 shares of the Company's common stock to Redwood Management LLC for payment of \$13,000 for note conversion.

On October 2, 2012, the Company issued 300,000 shares of the Company's common stock to BeSpoke Growth Partners, Inc. for capital market public relations and business consulting services.

On October 3, 2012, the Company issued 2,045,454 shares of the Company's common stock to Redwood Management LLC for payment of \$4,500 for note conversion.

On October 3, 2012, the Company issued 5,000,000 shares of the Company's common stock to Asher Enterprises Inc for payment of \$15,000 for note conversion.

On October 4, 2012, the Company issued 7,668,692 shares of the Company's common stock to Bespoke Growth Partners, Inc. for payment of \$9,202.43 for capital market public relations and business consulting services.

On October 4, 2012, the Company issued 500,000 shares of the Company's common stock to Provsta Life Sciences for payment of \$32,500 for technology.

On October 8, 2012, the Company issued 837,500 shares of the Company's common stock to Asher Enterprises Inc for payment of \$2,680 for note conversion.

On October 9, 2012, the Company issued 1,250,000 shares of the Company's common stock to StockVest for payment of \$11,250 for services.

On October 9, 2012, the Company issued 5,405,405 shares of the Company's common stock to Matt Morns for payment of \$10,000 for note conversion.

On October 12, 2012, the Company issued 1,500,000 shares of the Company's common stock to JSBarkats PLLC for payment of \$7,500 for legal services.

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On October 16, 2012, the Company issued 6,818,181 shares of the Company's common stock to Redwood Management LLC for payment of \$15,000 for note conversion.

On October 16, 2012, the Company issued 8,000,000 shares of the Company's common stock to Brian Holden for payment of \$16,000 for note conversion.

On October 17, 2012, the Company issued 4,943,244 shares of the Company's common stock to Matt Morris for payment of \$9,145 for note conversion.

On October 22, 2012, the Company issued 8,695,652 shares of the Company's common stock to Redwood Management LLC for payment of \$20,000 for note conversion.

On October 22, 2012, the Company issued 10,810,810 shares of the Company's common stock to Mathew Morris for payment of \$20,000 related to the conversion of a Convertible Promissory Note.

On October 26, 2012, the Company issued 10,000,000 shares of the Company's common stock to Neuroscience Associates for payment of \$68,000 related to technical services provided to the Company.

On October 26, 2012, the Company issued 3,043,478 shares of the Company's common stock to Redwood Management LLC for payment of \$7,000 for note conversion.

On October 29, 2012, the Company issued 1,000,000 shares of the Company's common stock to Joseph Rubinfeld for payment of \$10,000 related to the conversion of a Convertible Promissory Notes.

On October 30, 2012, the Company issued 5,405,405 shares of the Company's common stock to Matt Morris for payment of \$10,000 for note conversion.

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On October 31, 2012, the Company issued 5,700,000 shares of the Company's common stock to Scott VanderMeer for payment of \$10,000 for note conversion.

On October 31, 2012, the Company issued 2,000,000 shares of the Company's common stock to Brian Holden for payment of \$4,000 for note conversion.

On November 1, 2012, the Company issued 2,000,000 shares of the Company's common stock to R. Chris Cottone for payment of \$12,000 for services.

On November 2, 2012, the Company issued 5,000,000 shares of the Company's common stock to Jeff Stephens for payment of \$12,000 related to the conversion of a Convertible Promissory Notes.

On November 2, 2012, the Company issued 5,000,000 shares of the Company's common stock to Scott VanderMeer for payment of \$12,000 related to the conversion of a Convertible Promissory Notes.

On November 2, 2012, the Company issued 7,000,000 shares of the Company's common stock to Ascendent Partners, LLC for payment of \$11,436.88 related to the conversion of a Convertible Promissory Note.

On November 9, 2012, the Company issued 750,000 shares of the Company's common stock to VStock Transfer, LLC for payment of \$6,750 related to transfer agent services.

On November 10, 2012, the Company issued 500,000 shares of the Company's common stock to Scott VanderMeer for payment of \$5,000 related to a Convertible Promissory Note conversion.

On November 10, 2012, the Company issued 264,063 shares of the Company's common stock to Sheryl Clark for payment of \$10,552.52 related to a Convertible Promissory Note conversion.

On November 12, 2012, the Company issued 3,500,000 shares of the Company's common stock to Dustin Johns for payment of \$7,500 related to the conversion of a Convertible Promissory Notes.

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On November 19, 2012, the Company issued 23,000,000 shares of the Company's common stock to Ironridge Global IV, Ltd for payment of \$464,600 related to the conversion of some trade debt.

On November 19, 2012, the Company issued 9,998,578 shares of the Company's common stock to Dominion Capital, LLC for payment of \$84,987.91 related to the conversion of a Convertible Promissory Note.

On November 28, 2012, the Company issued 10,000,000 shares of the Company's common stock to Dominion Capital, LLC for payment of \$85,000 related to the conversion of a Convertible Promissory Note.

On December 5, 2012, the Company issued 8,823,530 shares of the Company's common stock to Dominion Capital LLC for payment of \$75,000. related to the conversion of a Convertible Promissory Notes.

On December 6, 2012, the Company issued 3,962,679 shares of the Company's common stock to Ironridge Global IV, Ltd for payment of \$80,050.16 related to the conversion of some trade debt.

On December 10, 2012, the Company issued 1,240,165 shares of the Company's common stock to Ironridge Global IV, Ltd for payment of \$24,374.45 related to the conversion of some trade debt.

On December 18, 2012, the Company issued 10,000,000 shares of the Company's common stock to Ascendent Partners, LLC for payment of \$30,000 related to the conversion of a Convertible Promissory Notes.

On December 21, 2012, the Company issued 1,732,282 shares of the Company's common stock to Hanover Holdings I, LLC for payment of \$22,575 related to the conversion of a Convertible Promissory Notes.

On December 26, 2012, the Company issued 9,333,876 shares of the Company's common stock to David Fiamingo. for payment of \$31,080.51 related to the conversion of Convertible Promissory Notes.

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13. Stock option plan

The Company's Board of Directors has approved the 2008 Stock Plan (the "Plan"). Under the Plan, the Board of Directors may grant up to 10,742,127 shares of incentive stock options, nonqualified stock options, or stock awards to eligible persons, including employees, nonemployees, members of the Board of Directors, consultants, and other independent advisors who provide services to the Company. In general, options are granted with an exercise price equal to the fair value of the underlying common stock on the date of the grant. Options generally have a contractual life of 10 years and vest over periods ranging from being fully vested as of the grant dates to four years.

	Outstanding Options			
	Common Shares Available for Grant	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Balance – January 14, 2008 (date of inception)	—	—	—	—
Shares added to plan	6,085,136	—	—	—
Balance – December 31, 2008	6,085,136	—	—	—
Balance – December 31, 2009	6,085,136	—	—	—
Shares added to plan	4,656,991	—	—	—
Options granted	(3,206,494	) 3,206,494	0.01	—
Balance – December 31, 2010	7,535,633	3,206,494	0.01	9.2
Options granted (weighted-average fair value of \$0.0237)				
Employee	(4,610,442	) 4,610,442	0.01	—
Non-Employee	(3,601,407	) 3,601,407	0.01	—
Cancelled shares	2,212,092	(2,202,171)	—	—
Options Exercised	—	(7,532,454)	0.01	—
Balance – December 31, 2011	1,535,876	1,683,718	0.01	8.0
Options granted (weighted-average fair value of \$0.xxx)				
Employee	—	—	—	—
Non-Employee	—	—	—	—
Cancelled shares	—	—	—	—
Options Exercised	—	—	—	—
Balance – December 31, 2011	1,535,876	1,683,718	0.01	7.0
Common shares equivalents	—	—	—	—
Options vested December 31, 2012	7,311,996			
Options vested and expected to vest December 31, 2012	7,951,362			

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In July, 2012, our Board of Directors adopted a new stock plan, the Management, Employee, Advisor and Director Preferred Stock Option Plan – 2012 Series B Convertible Preferred Stock Plan. The purposes of this Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Management, Employees, Advisors and Directors and to promote the success of our business. Certain current and former Management, Employees, Advisors and Directors were awarded a total of 1,248,000 options to purchase Series B Preferred shares on July 15, 2012, and an additional 1,200,000 options on November 4, 2012. These options currently vest over four years and cannot be converted into common or sold for two years from the date of the Designation of the Series B Preferred shares. Each share of the Series B Preferred stock converts into fifty shares of common stock

	Outstanding Options Preferred			
	Shares Available for Grant	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Balance – December 31, 2012	—	—	—	—
Shares added to the plan	\$2,500,000			
Options granted (weighted-average fair value of \$0.0237)				
Employee	(2,287,500	) 2,287,500	0.4742	9.5
Non-Employee	(160,500	) 160,500	0.225	9.8
Balance – December 31, 2012	52,000	2,448,000	0.4578	9.6
Options vested December 31, 2012	805,000			
Options vested and expected to vest December 31, 2012	2,448,000			

Stock-based compensation expense for all plans for the years ended December 31, 2012 and 2011, and the period from January 14, 2008 (date of inception) to December 31, 2012, is classified in the statements of operations as follows:

	Year ended December 31, 2012	Year ended December 31, 2011	From January 14, 2008 (Inception) to December 31, 2012
Research and development	\$ 101,566	\$ 535,931	\$ 642,043
General and administrative	282,038	120,321	423,018

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Total	\$383,604	\$656,252	\$1,065,061
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At December 31, 2012, there was a total of \$704,553 of unrecognized compensation cost — net of estimated forfeitures, related to non-vested stock option awards, which is expected to be recognized over a weighted-average period of approximately 2.0 years.

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The fair value of the Company's stock-based awards during the year ended December 31, 2012, and the period from January 14, 2008 (date of inception) to December 31, 2012, was estimated using the following weighted-average assumptions:

	Year Ended December		Year Ended December	
	31, 2012		31, 2011	
Weighted-average volatility	108.0	%	71.0	%
Weighted-average expected term	5		5	
Expected dividends	None		None	
Risk-free investment rate	0.5	%	2.3	%

14. INCOME TAXES

The reported amount of income tax expense attributable to operations for the year differs from the amount that would result from applying domestic federal statutory tax rates to loss before income taxes from operations as summarized below:

	Year ended December	Year ended December	From January 14, 2008 (Inception) to December 31, 2012
	31, 2012	31, 2011	
Federal tax expense (benefit) at statutory rate	\$(1,746,110)	\$(1,509,635)	\$(3,908,699)
State tax expense (benefit) net of federal tax effect	—	—	—
R&D Credit	(19,994)	(31,874)	(74,344)
Non-deductible expenses	(88,368)	(149,514)	(43,114)
Change in Valuation Allowance	1,677,736	1,664,730	3,999,865
Other	—	26,293	26,293
Total tax expense	—	—	—

The significant components of deferred tax assets are as follows:

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	Year ended December 31, 2012	Year ended December 31, 2011
Deferred tax assets:		
Net operating loss carry-forward	\$4,162,890	\$2,384,038
Tax credit carry-forward	125,954	92,080
Accrued liabilities	419,704	258,356
Capitalized start-up costs	15,194	15,194
Depreciation	1,351	(659)
Gross Deferred Tax Assets	4,725,093	2,749,009
Valuation Allowance	\$(4,725,093)	\$(2,749,009)

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The Company's accounting for deferred taxes involves the evaluation of a number of factors concerning the realizability of the Company's net deferred tax assets. The Company primarily considered such factors as the Company's history of operating losses, the nature of the Company's deferred tax assets and the timing, likelihood and amount, if any, of future taxable income during the periods in which those temporary differences and carryforwards become deductible. At present, the Company does not believe that it is more likely than not that the deferred tax assets will be realized; accordingly, a full valuation allowance has been established and no deferred tax asset is shown in the accompanying balance sheets. The valuation allowance increased by approximately \$1,976,084, \$1,967, 137, and \$4,725,093 during the years ended December 31, 2012, December 31, 2011 and for the period from January 14, 2008 (date of inception) to December 31, 2012, respectively.

As of December 31, 2010, the Company had net federal and state net operating loss carryforwards of approximately \$ 10,449,908 and \$ 10,453,883, respectively. These net operating loss carry forwards will begin to expire, if not utilized, beginning in 2028 for both federal and state income tax purposes. The Company also has federal and state research and development credit carryforwards of approximately \$ 73,344 and \$ 78,199, respectively. The federal credits will expire if not utilized beginning in 2029. The California credits do not expire.

The Tax Reform Act of 1986 and similar California legislation impose substantial restrictions on the use of net operating losses and tax credits in the event of an ownership change of a corporation. Accordingly, the Company's ability to use net operating losses and credit carry forwards may be significantly limited in the future as a result of such an ownership change.

On January 1, 2009, the Company adopted a newly issued standard of accounting for uncertain tax positions. This standard prescribes a comprehensive model for the recognition, measurement, presentation and disclosure in financial statements of any uncertain tax positions that have been taken or expected to be taken on a tax return. The cumulative effect of adopting the new standard resulted in no adjustment to retained earnings as of January 1, 2009. No liability related to uncertain tax positions is recorded on the financial statements. It is the Company's policy to include penalties and interest expense related to income taxes as a component of tax expense, as necessary.

Beginning balance January 1 2012	\$	12,391
Increase/(decrease) of unrecognized tax benefits taken in prior years		—
Increase/(decrease) of unrecognized tax benefits related to current year		4,558
Increase/(decrease) of unrecognized tax benefits related to settlements		—
Reductions to unrecognized tax benefits related lapsing statute of limitations		—

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Ending balance at December 32, 2012	\$	16,949
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The total amount of unrecognized tax benefits that if recognized, would affect the effective tax rate is \$0.

The Company has not incurred any interest or penalties as of December 31, 2012. The Company does not anticipate any significant change within 12 months of this reporting date of its uncertain tax positions. The Company is subject to taxation in the US and California. There are no ongoing examinations by taxing authorities at this time.

The Company's tax years 2008 through 2012 will remain open for examination by the federal and state authorities for 3 and 4 years, respectively, from the date of utilization of any net operating loss credits.

15. 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.

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16. 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 Amaranthus Bioscience, Inc. in 2010, and now Amaranthus 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 Executive 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 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.

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 \$222,083 as of December 31, 2012 and 2011, respectively in obligations reflecting this liability in its financial statements. The Company recorded the assumption of the Neurotrophics debts as a distribution in 2008.

In February 2011, the Company and Neurotrophics agreed to enter into two agreements regarding compensation for the March 5, 2008 transfer of the rights to MANF and issued notes in the amounts of \$222,083 and \$59,319, in favor

of Neurotrophics and John and Gerald Commissiong, respectively. These notes bear interest at the rate of 2% per annum, and have maturity dates of March 5, 2015 and December 30, 2015, respectively. The loans may be repaid at the Company's option on or before the maturity dates in the form of common stock of the Company at the then fair market value. As of December 31, 2012 the notes with the Commissiong's have been paid.

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."

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The Company obtained the services of its former Chairman Martin D. Cleary through a consulting agreement. During the years ended December 31, 2012, 2011, and the period from January 14, 2008 (date of inception) to December 31, 2012, consulting services of \$00, \$200,000, and \$479,166, respectively are included in the 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 holds \$160,172 of Convertible Promissory Note 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.

As of December 31, 2012 advances of \$34,877 and \$23,200 are due from John and Gerald Commissiong, respectively.

17. SUBSEQUENT EVENTS

The Company evaluated subsequent events through the date its financial statements were available for issuance. The Company determined that the financial statements were available for issuance on April 16, 2013.

On January 17, 2013, the Board of Directors of Amarantus BioScience, Inc. adopted a unanimous written resolution authorizing the Company's officers, agents, and counsel to take any and all action reasonably necessary to cause the immediate cessation of trading and delisting of Amarantus common stock from the Berlin-Bremen Stock Exchange (the "BBSE"), or from any unofficially regulated markets controlled by the BBSE, including the commencement of legal proceedings in the United States or Germany against the BBSE or any broker or other unauthorized person making a market in the Company's stock in Germany through the BBSE or otherwise. The Company's common stock was listed on the BBSE without the Company's prior knowledge, consent, or authorization. The Company did not authorize or direct any BBSE broker to act as market maker for the Company's common stock, and believes such listing is part of an organized effort to circumvent U.S. securities laws, including the restrictions against "naked short selling."

The Company believes that de-listing from the BBSE will facilitate the orderly trading of the Company's stock.

Aegis Capital served as placement agent on the transaction and received 10% in placement agent fees. Approximately \$200,000 of the use of proceeds will be specifically directed to settle ongoing litigation with Alpha Capital Ansalt.

On February 1st, 2013, the Company settled ongoing litigation with Trinet, Inc. for \$14,000 in cash. The Company is working to resolve all pending litigation.

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On February 7th, 2013, the Company completed a series of transactions related to the restructuring of certain convertible debentures and related warrants that are currently in default. As a result, the Company executed two separate amended and restated Convertible Promissory Notes in the amounts of \$375,000 and \$187,500 (the “New Notes”), respectively, payable to Dominion Capital, LLC. The Company had defaulted on Promissory Notes issued in 2011 to certain individual investors in the total aggregate amount of \$375,000 (the “Old Notes”), and related cashless warrants in the amount of \$500,000. Dominion capital paid \$562,500 to acquire the Old Notes, and as part of the transaction all of the related warrants have been retired, inclusive of a \$37,500 payment from the Company to certain warrant holders. The Old Notes and Related warrants had a conversion feature equal to a 66.6% floorless discount to a ‘Next Equity Financing’, defined as a financing where equity, or debt that was convertible into common stock, with a fixed price conversion feature. As a result of the 30 January financing previously announced, the Old Notes and Warrants, inclusive of interest, would have been convertible into approximately \$900,000 in common shares priced at \$0.0333/share, which would have equated to 27,000,000 common shares.

As a result, of the transactions listed above, \$375,000 note is immediately convertible at a price of \$0.015/share, equal to 25,000,000 common shares. The \$187,500 is also priced at \$0.015/share, however the note is not convertible for 6 months and the Company can repurchase this note at any time until maturity.

Concurrently, the Company has retired a series of convertible notes with toxic financing terms that were issued between June 30, 2013 and November 1, 2013.

As a result of these transactions, the Company has eliminated the costly potential default and reset provisions associated with the Old Notes and Warrants that the Company believes were a potential impediment to future growth and more favorable future financing alternatives. With the retirement of the Old Notes and repurchase by the Company of the Warrants, the Company is no longer in default of any convertible notes or warrants, and has eliminated the risk of the further dilutive potential of resets and default provisions contained within those retired instruments. The company believes that this has streamlined and enhanced its capitalization structure placing the Company in a better positioned to move forward with the execution of its scientific advancement plan.

On February 15, 2013, Amaranthus Bioscience, Inc. (“Amarantus”) and Alpha Capital Anstalt (“Alpha”) entered into a Stipulation of Discontinuance with respect to Alpha Capital Anstalt v. Amaranthus Biosciences, Inc., N.Y. Supreme Ct., County of N.Y., Index No. 653962/2012 (the “Alpha Lawsuit”). The Stipulation of Discontinuance dismisses with prejudice the Alpha Lawsuit.

The Alpha Lawsuit concerned a claim by Alpha (contested by Amaranthus) that a certain note, dated October 4, 2011, in the principal amount of \$150,000, and due on April 1, 2012, which had been issued by Amaranthus to a third party and was purchased by Alpha, was in default. On 15 February 2013, Alpha executed a Satisfaction and Release whereby Alpha acknowledged full payment and satisfaction of the note in question, and expressly released Amaranthus from any further claims or liabilities under the loan. Amaranthus made the full payment in cash, and did not issue any common stock in connection with settlement of the suit.

On March 4, 2013, Amaranthus Bioscience, Inc., a Delaware corporation (“Amaranthus” or the “Company”), terminated that certain non-binding Letter of Intent (the “LOI”), dated June 30, 2012, entered into by and between the Company and Rainbow Biosciences, LLC, a wholly-owned subsidiary of Rainbow Coral Corp. (OTCBB:RBCC). Pursuant to the terms of the LOI, the two companies were to investigate the feasibility of a joint venture, purchase or partnership to develop and commercialize the Company’s intellectual property. Upon further consideration of the proposed transaction, the Company elected to terminate the LOI prior to the consummation of a definitive agreement that would have defined the terms of any joint venture, purchase or partnership. Amaranthus has not received funding from RBCC and the parties have never entered into any formal agreement to further the development and commercialization of the Company’s intellectual property with RBCC.

On April 1, 2013 Amaranthus BioScience, Inc. (the “Company”) filed a Certificate of Designation with the State of Nevada creating a series of 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 of Series B Convertible Preferred Stock consisting of 2,500,000 shares. A copy of the Series C Certificate of Designation and the Series B Certificate of Designation filed herewith as Exhibit 3.1 and Exhibit 3.2, respectively.

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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.

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.

On April 3, 2013, the Company entered into a Settlement Agreement and Release with On Assignment Staffing Services, Inc. ("On Assignment") pursuant to which the Company will pay On Assignment an aggregate of \$45,000 over a period of time and On Assignment will dismiss its lawsuit against the Company currently pending in Santa Clara County, California. The Company is no longer subject to any legal proceedings.

On April 4, 2013, the Company announced that it was adopting a holding company structure with separate business units in order to more effectively develop its various assets and would be changing its name to Amarantus Bioscience Holdings, Inc. Concurrently, the Company has requested a change in its Committee on Uniform Security Identification Procedures (CUSIP) number.

On April 4th, 2013, the Company received the Final Report from the Swiss-based, neuroscience-focused consulting firm the company previously disclosed it 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".

On April 5, 2013, Amarantus Bioscience Holdings, Inc. (formerly known as Amarantus Bioscience, Inc.) (the "Company") filed a Certificate of Amendment to its Articles of Incorporation with the Secretary of State of Nevada, pursuant to which the Company's name was changed from Amarantus Bioscience, Inc. to Amarantus Bioscience Holdings, Inc.

On 30 January 2013, Amarantus Bioscience, Inc. ("Amarantus") executed an amendment to a Convertible Promissory Note payable to Dominion Capital, LLC or its registered assigns (the "Dominion Note"), dated November 14, 2012, 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 Dominion Note bears interest at the rate of ten percent (10%) per annum until paid in full and is convertible into shares of the Company's common stock, subject to certain restrictions, at a price of \$0.10 per share. The Dominion Note has been amended to provide for an extended amortization schedule with a final maturity date of 28 October 2013. The Company has the option to pay the Dominion 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 30th, 2013. The extended amortization schedule provides for payments of \$200,000 to \$250,000 every 2 weeks until the end of April 2013.

An additional \$150,000 of convertible notes has converted to common stock.

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Item 9. Changes In and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

As of the end of the period covered by this report, we conducted an evaluation, under the supervision and with the participation of our chief executive officer and our principal financial officer of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Exchange Act). Based upon this evaluation, our chief executive officer and our principal financial officer concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. There was no change in our internal controls or in other factors that could affect these controls during our last fiscal year that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Evaluation of Disclosure Controls and Procedures. Our management, with the participation of our CEO and our CFO, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on that evaluation, our CEO and our CFO concluded that our disclosure controls and procedures as of the end of the period covered by this report were not effective to ensure that information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including our CEO and CFO, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. A controls system cannot provide absolute assurance, however, that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

Management's Annual Report on Internal Control over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes of accounting principles generally accepted in the United States.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance of achieving their control objectives.

Our management, with the participation of the CEO, evaluated the effectiveness of the Company's internal control over financial reporting as of December 31, 2012. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control — Integrated Framework. Based on this evaluation, our management, with the participation of the CEO, concluded that, as of December 31, 2012, our internal control over financial reporting was ineffective and identified the following material weaknesses:

- There is a lack of accounting personnel with the requisite knowledge of Generally Accepted Accounting Principles in the U.S. ("GAAP") and the financial reporting requirements of the U.S. Securities and Exchange Commission;
- There are insufficient written policies and procedures to insure the correct application of accounting and financial reporting with respect to the current requirements of GAAP and SEC disclosure requirements; and
- There is a lack of segregation of duties, in that the Company only had one person performing all accounting-related duties.

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Notwithstanding the existence of these material weaknesses in the Company's internal control over financial reporting, the Company's management believes that the consolidated financial statements included in its reports fairly present in all material respects the Company's financial condition, results of operations and cash flows for the periods presented.

The Company will continue its assessment on a quarterly basis and as soon operations begin the Company plans to hire personnel and resources to address these material weaknesses. The Company believes these issues can be solved with hiring in-house accounting support and plan to do so as soon as the Company has funds available for this. There has been no change in its internal control over financial reporting that occurred during the Company's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permits us to provide only management's report in this annual report.

Changes in Internal Control over Financial Reporting. There were no changes in our internal control over financial reporting that occurred during the fourth quarter of the year ended December 31, 2012 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance.

The following information sets forth the names, ages, and positions of the Company's current directors and executive officers as of March 14, 2013:

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<u>Name</u>	<u>Age</u>	<u>Office(s) held</u>
Gerald E. Commissiong	30	President and Chief Executive Officer, Director
Dr. John W. Commissiong	68	Chief Scientific Officer, Director
Marc E. Faerber	58	Chief Financial Officer, Treasurer, Secretary
Robert L. Harris	69	Director
Mark Benedyk	49	Director

Set forth below is a brief description of the background and business experience of each of our current executive officers and directors.

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Gerald E. Commissiong, Chief Executive Officer, President, Director

Mr. Commissiong has served as the Chief Operating Officer and a Director of Amarantus since April of 2011. On October 23, 2011, Mr. Commissiong was appointed to serve as the Company's Chief Executive Officer and President. Mr. Commissiong was the co-founder and original President and Chief Executive Officer of Amarantus, which was formerly known as CNS Protein Therapeutics, Inc. He played a significant role in sourcing the seed funding for the Company in 2008, assisted in developing a strategic corporate development pathway that involved the recruitment of relevant expertise, identification of appropriate development strategy, liaising with expertise to define development pathway, creation of a technological mitigation strategy and the identification of appropriate funding partners with a strategic interest in the Company's technology. Mr. Commissiong also recruited senior executives to the Board to guide the Company's growth and generated its official marketing materials, including investor brochures, corporate handouts, email newsletters and other materials necessary to raise awareness of the company. Prior to co-founding Amarantus, Mr. Commissiong played professional football for the Calgary Stampeders of the Canadian Football League. Mr. Commissiong holds a B.S. degree in Management Science and Engineering with a focus Financial Decisions from Stanford University.

Dr. John W. Commissiong, Chief Scientific Officer, Director

Dr. Commissiong has served as the Chief Scientific Officer and a Director of Amarantus since co-founding the Company in 2008. From 2000 through 2008 Dr. Commissiong served as the CSO of Neurotrophics Inc & Prescient Neuropharma Inc. Dr. Commissiong has been focused on the discovery of novel neurotrophic factors for the treatment of neurodegenerative diseases as well as understanding the fundamental underlying biology of protoplasmic type-1 astrocytes that secrete neurotrophic factors. He was Chief of the Neural Transplantation Unit, NINDS-NIH, from 1989-94 where his research focused on identifying therapeutic approaches to spinal cord injury. Dr. Commissiong was Head of the Neurotrophic Factors Group, NINDS-NIH, from 1994-97 where he focused on developing technologies to systematically identify novel neurotrophic factors with applications for specific Central Nervous System disorders. He co-founded Prescient Neuropharma in 1999, and discovered MANF in 2003. MANF is currently in preclinical development for the treatment of Parkinson's disease. The work pioneered by Dr. Commissiong has led to significant advancements in the field of astrocyte-neuron biology. Dr. Commissiong believes that a fundamental understanding of astrocyte-neuron interactions in the Central Nervous System will lead to a new generation of therapies to treat brain-related disorders.

Dr. Commissiong did his Postdoctoral work in the Lab Preclin Pharmac, NIMH-NIH, concentrating on the application of quadrupole mass spectrometry in the analysis of neurotransmitters. He holds a Ph.D. in Neurophysiology from the University of Southampton, a M.Sc. in Biochemical Pharmacology from the University of Southampton and a B.S. in Biology and Chemistry from the University of the West Indies.

Marc E. Faerber, Chief Financial Officer, Treasurer, Secretary

Mr. Faerber has served as the Chief Financial Officer of Amaranthus since May 2009. In addition, Mr. Faerber has worked as an independent business and financial advisor since 2001 to the present. In that capacity, he provides financial, business and strategic advisory services to various startup entities, including medical device, biotechnology, software and alternative energy related companies. His services and experience include facilitating startups in establishing appropriate internal controls, developing administrative procedural processes, writing and critiquing business plans and strategies, preparation of company presentations, short term financial operating plans, and long term strategic financial planning, assisting organizations with seeking financing and rendering advice in various negotiations related to merger and acquisitions, distribution rights, technology licensing and other business structural issues, and review and implementation of internal control structures in support of Sarbanes Oxley compliance. Mr. Faerber is a licensed CPA (Inactive) in California and was a Certified Valuation Analyst from 2004 through 2007. He holds a B.S. in Business Administration from Providence College and has done course work towards a M.S. in Taxation at Golden Gate University.

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Robert L. Harris, Director

Mr. Harris has served as a member of the Board of Amarantus since December 2010. Mr. Harris is a retired Vice President of Environmental, Health, Safety, Technical and Land Services at Pacific Gas and Electric Company, where he worked from September 1972 to January 2007. He graduated from San Francisco State University in 1965 and received his Juris Doctor degree from the University of California School of Law at Berkeley (Boalt Hall) in 1972. He was admitted to the California State Bar in December 1972 and argued and won a case in the United States Supreme Court in 1985. Harris also completed the Harvard Graduate School of Business Advanced Management Program and the Management Development Program at Duke University's School of Business. For five years, Harris was selected by Ebony magazine as one of the "100 Most Influential Blacks in America" (1980, 1992, 1993, 1994 and 1995).

Dr. Mark Benedyk, Director

Dr. Benedyk recently joined the Board of Amarantus in March 2013. Dr. Benedyk is currently a Managing Partner at Rila Partners LLC, a business and corporate development consultancy. In this role he serves on the Strategic Advisory Board of KemPharm, Inc., is a Director at the Center for Drug Research and Development Ventures, Inc., and is a member of the Translational Medicine Advisory Board of the CNS Regenerative Medicine Foundation. Previously he was head of The Pfizer Incubator (TPI) where his duties included membership on the TPI Board of Directors, board positions with TPI portfolio companies, oversight of the TPI operations team, and reviewing investment opportunities in multiple technologies. Dr. Benedyk has held executive business development roles at Ascenta Therapeutics, Optimer Pharmaceuticals, Aurora Biosciences (acquired by Vertex Pharmaceuticals), and Elan Pharmaceuticals, where he led partnering efforts for several key clinical-stage products for the treatment of Alzheimer's Disease, migraine and other neurological indications. He received his Ph.D. in Developmental and Molecular Genetics from The Rockefeller University, and Bachelor of Science degree in Microbiology and Botany from the University of Michigan.

Family Relationships

There are no family relationships between or among the directors, executive officers or persons nominated or chosen by the Company to become directors or executive officers, except that two of the Company's officers and directors, Dr. John Commissiong and Gerald Commissiong, are father and son.

Involvement in Certain Legal Proceedings

To our knowledge, during the past ten (10) years, none of our directors, executive officers, promoters, control persons, or nominees has been:

- the subject of any bankruptcy petition filed by or against any business of which such person was a general partner or executive officer either at the time of the bankruptcy or within two years prior to that time;
- convicted in a criminal proceeding or is subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, permanently or temporarily enjoining, barring, suspending or otherwise limiting his involvement in any type of business, securities or banking activities; or
- found by a court of competent jurisdiction (in a civil action), the Commission or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law

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Corporate Governance

Committees of the Board

The Company does not currently have a compensation committee, executive committee or stock plan committee.

Audit Committee

The Company does not have a separately designated standing audit committee. The entire Board performs the functions of an audit committee, but no written charter governs the actions of the Board when performing the functions of what would generally be performed by an audit committee. The Board approves the selection of the Company's independent accountants and meets and interacts with the independent accountants to discuss issues related to financial reporting. In addition, the Board reviews the scope and results of the audit with the independent accountants, reviews with management and the independent accountants the Company's annual operating results, considers the adequacy of the Company's internal accounting procedures and considers other auditing and accounting matters including fees to be paid to the independent auditor and the performance of the independent auditor.

The Company's Board, which performs the functions of an audit committee, does not currently have a member who would qualify as an "audit committee financial expert" within the definition of Item 407(d)(5)(ii) of Regulation S-K. Marc Faerber, the Company's Chief Financial Officer, Secretary and Treasurer, attends all meetings of the Company's Board, including those meetings at which the Board is performing those functions which would generally be performed by an audit committee. Mr. Faerber is a licensed CPA (inactive) in California. Mr. Faerber is experienced in facilitating startups in establishing appropriate internal controls, developing administrative procedural processes, and review and implementation of internal control structures in support of Sarbanes Oxley compliance. Mr. Faerber is technically proficient concerning GAAP, SEC and IRS rules and reporting, and in addressing internal control issues and assuring SOX compliance.

Nomination Committee

We do not presently have a nominating committee. Our board of directors currently acts as our nominating committee.

Code of Ethics

The Company has yet to adopt a Code of Ethics.

Board Leadership Structure and Role in Risk Oversight

Our Board of Directors is primarily responsible for overseeing our risk management processes. The Board of Directors receives and reviews periodic reports from management, auditors, legal counsel, and others, as considered appropriate regarding our Company's assessment of risks. The Board of Directors focuses on the most significant risks facing our company and our Company's general risk management strategy, and also ensures that risks undertaken by our Company are consistent with the Board's appetite for risk. While the Board oversees our Company, our Company's management is responsible for day-to-day risk management processes. We believe this division of responsibilities is the most effective approach for addressing the risks facing our Company and that our Board leadership structure supports this approach.

Table of Contents**Item 11. Executive Compensation.****Summary Compensation Table**

The table below summarizes all compensation awarded to, earned by, or paid to each named executive officer for the Company's last three completed fiscal years for all services rendered to the Company.

SUMMARY COMPENSATION TABLE

Name and principal position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Gerald E. Commissiong, President, Chief Executive Officer	2012	-	-	-	456,031	-	-	-	456,031
	2011	24,758	-	-	36,750	-	-	-	61,508
	2010	45,000	-	-	-	-	-	-	45,000
Marc Faerber, Chief Financial Officer, Treasurer, Secretary	2012	248,344	-	-	299,438	-	-	-	547,782
	2011	178,465	-	-	22,074	-	-	-	200,539
	2010	85,660	-	-	1,250	-	-	-	86,910

(1) Mr. Cleary resigned from his position as President and Chief Executive Officer on October 23, 2011. He remained on as Chairman of the Board until his resignation on July 31, 2012.

Table of Contents**Outstanding Equity Awards at Fiscal Year-End**

The table below summarizes all unexercised options, stock that has not vested, and equity incentive plan awards for each named executive officer as of December 31, 2012.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END TABLE**OPTION AWARDS****STOCK AWARDS**

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Shares of Stock That Have Not Vested (#)	Market Value of Shares or Shares of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market Payout Value of Unearned Shares, Other Rights That Have Not Vested (#)
Michael E. ...	(1) 269,329	(1)		(1) \$0.0237	(1) 4/10/21				
Chief Executive Officer, Director	(2) 317,643	(2) 653,607	—	(2) \$0.1400	(2) 7/15/22	—	—	—	—
	(3) -	(3) -		(3) \$0.7000	(3) 11/4/22				
Michael E. ...	(1) -	(1) -		(1) -	(1) -				
Member, Chief Financial Officer, Treasurer, Secretary	(2) 155,859	(2) -	—	(2) \$0.1400	(2) 7/15/22	—	—	—	—
	(3) -	(3) 331,641		(3) \$0.700	(3) 11/4/22				

(1) Common stock shares

(2) Preferred stock shares

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Table of Contents**Director Compensation**

The following summary compensation table sets forth all compensation awarded to, earned by, or paid to the named directors by the Company during the year ended December 31, 2012.

DIRECTOR COMPENSATION TABLE

Name	Fees Earned or Paid in			Non-Equity Incentive Plan	Non-Qualified Deferred Compensation		All Other Compensation Total
	Cash	Stock Awards	Option Awards	Compensation	Earnings	Compensation	
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Martin D. Cleary, Former Chairman of the Board of Directors (1)	34,725	-	12,375	-	-	-	47,100
Gerald E. Commissiong, Director	-	-	-	-	-	-	-
Dr. John W. Commissiong, Director	-	-	-	-	-	-	-
Robert L. Harris, Director	30,000	-	-	-	-	-	30,000
Eugene Mancino, Former Director (2)	15,000	-	13,750	-	-	-	28,750

(1) Mr. Cleary resigned from his position as Chairman of the Board on July 31, 2012.

(2) Mr. Mancino resigned from his position as a director of the Board on July 31, 2012.

Table of Contents**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.**

The following table sets forth the beneficial ownership of the Company's capital stock by each executive officer and director, by each person known by the Company to beneficially own more than five percent (5%) of any class of stock and by the executive officers and directors as a group. Except as otherwise indicated, all shares of common stock are owned directly and the percentage shown is based on 384,003,149 shares of common Stock issued and outstanding as of April 12, 2013. As used in this table, "beneficial ownership" means the sole or shared power to vote, or to direct the voting of, a security, or the sole or shared investment power with respect to a security (i.e., the power to dispose of, or to direct the disposition of, a security). In addition, for purposes of this table, a person is deemed, as of any date, to have "beneficial ownership" of any security that such person has the right to acquire within 60 days after such date

Title	Name and address of beneficial owner	Amount of beneficial ownership	Percent of class(1)
Current Executive Officers & Directors:			
	Gerald E. Commissiong		
Common Stock	190 Ryland St., #1223 San Jose, CA 95110	7,974,300 ⁽²⁾	1.95%
	Dr. John W. Commissiong		
Common Stock	1269 Lakeside Dr., #1103 Sunnyvale, CA 94085	19,846,925 ⁽³⁾	5.17%
	Marc Faerber		
Common Stock	6132 Crater Lake Court Pleasanton, CA 94588	1,086,625 ⁽⁴⁾	0.28%
	Robert L. Harris		
Common Stock	4082 Sequoyah Road Oakland, CA 94605	4,102,957	1.07%
Total of All Current Officers and Directors:		32,528,807	7.75%
5% Beneficial Owners: None			

(1) Based upon 340,125,688 shares of our Common Stock outstanding.

(2) The total for Mr. Gerald Commissiong includes 859,523 shares acquired under a Restricted Stock Purchase Agreement which currently may be re-purchased by the company at the original purchase price at any time during the 90 days following Mr. Commissiong's departure from the company. In addition, the total for Mr. Commissiong includes 269,329 shares which he has the option to acquire within the next 60 days at a price of \$0.0237 per share.

(3) The total for Mr. John Commissiong includes 959,801 shares acquired under a Restricted Stock Purchase Agreement which currently may be re-purchased by the company at the original purchase price at any time during the 90 days following Mr. Commissiong's departure from the company.

(4) The total for Mr. Faerber includes 426,891 shares acquired under a Restricted Stock Purchase Agreement which currently may be re-purchased by the company at the original purchase price at any time during the 90 days following Mr. Faerber's departure from the company.

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Item 13. Certain Relationships and Related Transactions, and Director Independence

Except as set forth below, during the last fiscal year, there have been no transactions, whether directly or indirectly, between us and any of our officers, directors or their family members.

In connection with certain liabilities incurred in connection with the Company's March 5, 2008, acquisition of the intellectual property rights to the MANF protein compound, the Company issued a promissory note as follows:

Note Payable To:	Amount	Due Date
Neurotrophics, Inc.	\$222,083	March 5, 2015

Dr. John Commissiong, the Company's Chief Scientific Officer and a Director, also founded Neurotrophics, Inc., a Canadian company, in 2003. Gerald Commissiong, Dr. John Commissiong's son, is the Company's Chief Executive Officer, President and a Director. Further information regarding these liabilities is contained in Note 12 to the financial statements.

At a meeting held October 26, 2010, the Board approved royalty rights for the Company's founders, Gerald Commissiong and John Commissiong, under which 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.

Director Independence

When applying the definition of independence set forth in Rule 4200(a)(15) of The Nasdaq Stock Market, Inc., the Company believes that Robert L. Harris is an independent director.

Item 14. Principal Accounting Fees and Services

The following table sets forth fees billed to us by our independent auditors for the years ended 2012 and 2011 for (i) services rendered for the audit of our annual financial statements and the review of our quarterly financial statements, (ii) services rendered that are reasonably related to the performance of the audit or review of our financial statements that are not reported as Audit Fees, and (iii) services rendered in connection with tax preparation, compliance, advice and assistance.

SERVICES	2012	2011
Audit fees	\$ 20,500	\$ 28,225
Audit-related fees	—	—
Tax fees	—	—
All other fees	—	—
Total fees	\$ 20,500	\$ 28,225

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PART IV

Item 15. Exhibits, Financial Statements Schedules.

Exhibit No.	Description
3.1	Certificate of Incorporation, as Amended (1)
3.2	Certificate of Amendment to Certificate of Incorporation (5)
3.3	Certificate of Amendment to the Certificate of Incorporation (11)
3.4	Bylaws(1)
3.5	Certificate of Amendment to Certificate of Incorporation-Delaware (13)
4.1	Senior Secured Convertible Promissory Note Agreement(1)
4.2	Form of Rights Agreement, Form of Certificate of Designations, Form of Right Certificate, and the Form of Summary of Rights to Purchase Preferred Shares (16)
10.1	Second Amendment to Senior Secured Convertible Promissory Note Agreement(1)
10.2	Convertible Promissory Note Agreement as Amended March 23, 2011(1)
10.3	Note and Warrant Purchase Agreement – Molecular Medicine Research Institute(1)
10.4	Sponsored Research Agreement(1)
10.5	Note and Warrant Purchase Agreement – The Parkinson’s Institute(1)
10.6	Promissory Note – Neurotrophics, Inc. (1)
10.7	Intellectual Property Assignment(1)
10.8	Data Transfer Agreement(1)
10.9	Consulting Agreement with Keelin Reeds Partners(1)
10.10	Executive Services Agreement, as Amended(1)
10.11	Sublease(1)
10.12	MJFF Research Grant Terms and Conditions(1)
10.13	2008 Stock Plan(1)
10.14	Letter of Agreement with Argot Partners, LLC(1)
10.15	Letter Agreement regarding Intellectual Properties Licensing and Collaboration Arrangements – GenereX Biotechnology Corp.(2)
10.16	Consent to Assignment – Juvaris BioTherapeutics, Inc. (3)
10.17	Lease Agreement, as amended – Juvaris BioTherapeutics, Inc. (3)
10.18	Note Purchase Agreement – Samuel Herschkowitz (4)
10.19	Promissory Note – Samuel Herschkowitz(4)
10.20	Letter Agreement regarding Pledged Shares – Samuel Herschkowitz(4)
10.21	Investment Agreement – Centurion Private Equity, Inc. (6)
10.22	Registration Rights Agreement – Centurion Private Equity, Inc. (6)
10.23	Exclusive License Agreement – Power 3 Medical Products, Inc.(7)
10.24	Management, Employee, Advisor and Director Preferred Stock Option Plan – 2012 Series B Convertible Preferred Stock Plan (8)
10.25	Convertible Promissory Note (9)
10.26	Convertible Promissory Note issued to Dominion Capital, LLC (12)
10.27	Stipulation and Order with Ironridge Global IV, Ltd. (12)
10.28	Exclusive License Agreement, effective December 14th, 2012, by and between Amaranthus Biosciences and Memory Dx, LLC (14)
10.29	Bill of Sale, dated December 19, 2012, by and between Lowell T. Cage, as the chapter 7 Trustee for Power3 Medical Products, Inc. and Amaranthus Biosciences, Inc. (15)

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- 10.30 Order Authorizing Sales of Intellectual Property Free and Clear of Liens, Claims and Encumbrances, dated December 17, 2012 (15)
- 10.31 Copy of Letter of Intent between Amarantus BioScience, Inc. and Brewer Sports International, LLC dated as of December 28, 2012 (17)
- 10.32* Amendment No 1 to Convertible Promissory Note issued to Dominion Capital, LLC
- 10.33 * Amendment No. 2 to Convertible Promissory Note issued to Dominion Capital, LLC
- 10.34* Amended and Restated Convertible Promissory note - \$375,000
- 10.35* Amended and Restated Convertible Promissory note - \$187,500
- 31.1* Certification of Chief Executive Officer pursuant to Rule 13a-14 of the Securities Exchange Act of 1934
- 31.2* Certification of Chief Financial Officer pursuant to Rule 13a-14 of the Securities Exchange Act of 1934
- 32.1* Certification of Chief Executive Officer pursuant to Section 1350
- 32.2* Certification of Chief Financial Officer pursuant to Section 1350
- 101.INS** XBRL Instance Document
- 101.SCH** XBRL Taxonomy Extention Schema
- 101.CAL** XBRL Taxonomy Extention Calculation Linkbase
- 101.DEF** XBRL Taxonomy Extention Definition Linkbase
- 101.LAB** XBRL Taxonomy Extention Label Linkbase
- 101.PRE** XBRL Taxonomy Extention Presentation Linkbase

* Filed herewith.

** The XBRL-related information in Exhibit 101 to this Registration Statement on Form S-1 shall not be deemed "filed" or a part of this registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, and is not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of those sections.

- (1) Incorporated by reference to Current Report on Form 8-K/A filed June 3, 2011
- (2) Incorporated by reference to Current Report on Form 8-K filed June 3, 2011
- (3) Incorporated by reference to Current Report on Form 8-K filed June 16, 2011
- (4) Incorporated by reference to Current Report on Form 8-K filed October 11, 2011
- (5) Incorporated by reference to Current Report on Form 8-K filed October 14, 2011
- (6) Incorporated by reference to Current Report on Form 8-K filed October 17, 2011
- (7) Incorporated by reference to Current Report on Form 8-K filed January 30, 2012
- (8) Incorporated by reference to Quarterly Report on Form 10-Q filed August 20, 2012
- (10) Incorporated by reference to Current Report on Form 8-K filed September 21, 2012
- (11) Incorporated by reference to Current Report on Form 8-K filed November 14, 2012
- (12) Incorporated by reference to Quarterly Report on Form 10-Q filed November 19, 2012
- (13) Incorporated by reference to Current Report on Form 8-K filed November 27, 2012
- (14) Incorporated by reference to Current Report on Form 8-K filed December 12, 2012

⁽¹⁵⁾ Incorporated by reference to Current Report on Form 8-K filed December 26, 2012

⁽¹⁶⁾ Incorporated by reference to Current Report on Form 8-K filed December 28, 2012

⁽¹⁷⁾ Incorporated by reference to Current Report on Form 8-K filed December 31, 2012

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the 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:

April
16,
2013

By: */s/ Gerald E. Commissiong*

Name: Gerald E. Commissiong
Title: Chief Executive Officer

(Principal Executive Officer)

Date:

April
16,
2013

By: */s/ Marc E. Faerber*

Name: Marc E. Faerber
Title: Chief Financial Officer

(Principal Financial Officer)

(Principal Accounting Officer)

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

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Name	Position	Date
/s/ Gerald E. Commissiong Gerald E. Commissiong	Chief Executive Officer (Principal Executive Officer), President, Director	April 16, 2013
/s/ Marc E. Faerber Marc E. Faerber	Chief Financial Officer (Principal Financial and Accounting Officer), Secretary, Treasurer	April 16, 2013
/s/ John Commissiong John Commissiong	Chief Scientific Officer, Director	April 16, 2013
/s/ Robert L. Harris Robert L. Harris	Director	April 16, 2013

