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Amarantus Outlines LymPro Alzheimer's Diagnostic Development Strategy

SUNNYVALE, Calif.--(BUSINESS WIRE)--Amarantus BioScience Holdings, Inc. (OTCQB: AMBS), a biotechnology company discovering and developing treatments and diagnostics for diseases associated with neurodegeneration and apoptosis, today announced a development timeline for its LymPro Blood Test for Alzheimer's disease ("LymPro"). LymPro is designed to diagnose Alzheimer's disease by identifying immune-based biomarkers in the blood of Alzheimer's patients, allowing physicians to definitively differentiate Alzheimer's disease from other forms of dementia, a key unmet medical need in the management of Alzheimer's patients. Human clinical studies for LymPro with over 160 patients have been completed to date, showing high sensitivity and specificity for Alzheimer's disease diagnosis.

"The LymPro assay represents a blood-based peripheral means to assess the integrity of the regulatory function of the cellular machinery within the Central Nervous System," said Amarantus corporate advisor Adam J. Simon, Ph.D. "Although we all experience various triggers and assaults on our brain as we age, why do some people succumb to Alzheimer's while others show cognitive resilience? The LymPro test can potentially tell us who is susceptible to abnormal cell-cycle re-entry and who has sufficiently strong regulatory function in their neurons to arrest cell-cycle re-entry due to triggers such as age, diet, viral infection, stress, or brain injury that could eventually lead to Alzheimer's disease."

After establishing the analytical performance of the assay in an outsourced GLP laboratory, Amarantus plans to conduct a small clinical performance study at an independent laboratory in the second quarter of 2013 to verify the previously published findings. During the third quarter of 2013, the Company expects to initiate a pivotal diagnostic accuracy study (Phase 2) at the same independent laboratory to generate sufficient data to validate the clinical performance (sensitivity / specificity) that would support a CLIA launch, with data available in the first half of 2014. As part of that pivotal study, LymPro will be evaluated as an "aid to the diagnosis of Alzheimer's disease." The Company intends to initiate commercial worldwide sales following assessment of the validation study data. Thereafter, the Company intends to gain U.S. clearance or approval for the test through the Food and Drug Administration's de-novo Pre-market notification 510(k) or Premarket Approval (PMA) process, which would represent a 3-month to 2-year process. Ultimately, the Company believes LymPro could be approved by the FDA as a companion diagnostic product in combination with one or more therapeutic products.

"We are excited with the progress and upcoming activities related to our LymPro Alzheimer's test, which addresses a market opportunity in excess of $500 million annually," said Gerald E. Commissiong, President and Chief Executive Officer of Amarantus. "The FDA has stated the importance of identifying Alzheimer's at the earliest stage, as that is where new treatments appear to have the greatest benefit to patients. We believe LymPro fits well within this overall strategy and will likely have the dual benefit of improving overall diagnosis

paradigms and accuracy, while also potentially reducing overall healthcare costs if combined with an appropriate therapeutic product as a companion diagnostic."

The field of diagnostics for Alzheimer's disease has been significantly bolstered in recent months with FDA guidance for drug developers to target experimental therapies of Alzheimer's disease towards earlier-stage patients, as well as guidance reducing the burden of proof for drug developers to gain an approval. In 2010 Eli Lilly & Co. acquired Alzheimer's diagnostic developer Avid Radiopharmaceuticals for $800 million, including $300 million up-front, following Avid's application for marketing approval to the FDA for florbetapir, a chemical agent used in the diagnosis of Alzheimer's disease during a PET imaging process. Amarantus believes that LymPro may have certain advantages over florbetapir, including the likely cost-effectiveness of LymPro as a simple blood test in comparison to more expensive neuro imaging techniques.

About Amarantus

Amarantus is a development-stage biotechnology company founded in January 2008. The Company is focused on developing unique products and proprietary technologies for the potential treatment and/or diagnosis of Parkinson's disease, Traumatic Brain Injury, Ischemic Heart Disease and other human diseases. The Company owns the intellectual property rights to Mesencephalic-Astrocyte-derived Neurotrophic Factor ("MANF") and is developing MANF-based products as treatments for neurological disorders where there is a significant unmet medical need. The Company also is a Founding Member of the Coalition for Concussion Treatment (#C4CT), a movement initiated in collaboration with Brewer Sports International seeking to raise awareness of new treatments in development for concussions and related nervous-system disorders. For further information please visit www.Amarantus.com.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements about the possible progress of the MANF technology in testing for Parkinson's disease, statements about expectations, plans and prospects of the development of Amarantus' diagnostic product candidates for Alzheimer's and Parkinson's disease, and the potential market size for the LymPro test for Alzheimer's disease. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including the risks associated with development of therapeutic drug candidates, as well as the risks, uncertainties and assumptions relating to the development of Amarantus' new product candidates, including those identified under "Risk Factors" in Amarantus' most recently filed Annual Report on Form 10-K and Quarterly Report on Form 10-Q and in other filings Amarantus periodically makes with the SEC. Actual results may differ materially from those contemplated by these forward-looking statements Amarantus does not undertake to update any of these forward-looking statements to reflect a change in its views or events or circumstances that occur after the date of this presentation.

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