

May 21, 2015



# Amarantus Enters Into CRO Agreement With Chiltern International to Commence Phase 2b Clinical Development of Eltoprazine in Parkinson's Disease Levodopa-Induced Dyskinesia

*- Company Completes Investigator Meetings in U.S. and E.U. in Preparation for Study Launch -*

*- Enrollment and Dosing for 60-Patient PD-LID Study on Track to Commence 2Q 2015 -*

SAN FRANCISCO and GENEVA, May 21, 2015 (GLOBE NEWSWIRE) -- [Amarantus BioScience Holdings, Inc.](#) (OTCQB:AMBS), a biotechnology company focused on developing therapeutic and diagnostic products for neurological disorders and orphan indications, announced that it has entered into a clinical trial agreement with Chiltern International (Chiltern), a leading global contract research organization (CRO), to manage the clinical research and monitoring program services for the Phase 2b study of eltoprazine in Parkinson's disease levodopa-induced dyskinesia (PD-LID).

The Company also announced that it has completed its clinical investigator meetings in both the United States and European Union and is on track to commence enrollment and dosing for the 60-patient international, multi-center PD-LID study in the second quarter of 2015.

"We selected Chiltern as our CRO partner for PD-LID Phase 2b development because of their proven excellence in quality and reliability in drug development along with their exceptional expertise in the managing the comprehensive and extensive international clinical study regulatory requirements," said Gerald E. Commissiong, President & CEO of Amaranthus. "Now that our investigator meetings have been completed in both the U.S. and the EU, we are ready to commence the eltoprazine dose response, efficacy and safety trial this quarter. The expansion of our team, via our collaboration with Chiltern, will allow us to advance the PD-LID program as efficiently and quickly as possible. The next step is to initiate our first clinical site and begin screening patients for enrollment in the study."

Chiltern will manage all clinical activities related to the Phase 2b eltoprazine study including clinical trial site approval and authorization, investigator and staff training, patient recruitment, timeline and budget monitoring, centralized program tracking systems, regulatory controls and responsibilities, data monitoring committee organization and administration, and trial data quality control and final data lock.

Dr. Jim Esinhart, CEO of Chiltern, added, "Our mission is to provide premier CRO services

to innovative and forward-thinking biopharmaceutical companies. As such, we are pleased to partner with Amarantus and manage the initiation of their Phase 2b study with eltoprazine. We recognize that PD-LID can be severely disabling and impact quality of life for Parkinson's patients and utilizing our award-winning trial management program and over 30 years of industry expertise, we look forward to advancing eltoprazine to its next level of clinical development and one-step closer to fulfilling its therapeutic potential for patients with PD."

The Phase 2b eltoprazine trial is a double-blind, placebo-controlled, four-way crossover, dose range finding, clinical study designed to evaluate dose response effect of repeated eltoprazine dosing on safety, tolerability and dyskinesia severity using state-of-the-art rating scales, diaries and motion sensors. Pharmacokinetics and pharmacodynamics will also be evaluated.

### **About Chiltern International**

Chiltern is a leading global CRO that listens to client needs in order to customize solutions for the Biopharma industry. With 33 years in service, Chiltern delivers from three specialized business units: Chiltern Biopharma, with deep therapeutic expertise for respiratory, anti-infectives / vaccines, ophthalmology, dermatology and other specialty areas; Chiltern Oncology, led by physicians, scientists and clinicians to uniquely manage all phases of hematologic and oncologic clinical drug development; and Chiltern Source, a world leader in tailored relationships for FSP, resourcing and staffing solutions. Chiltern's 2,200 engaged professionals work across 45 countries to deliver flexible, responsive solutions that are "Designed Around You". Further information is available at: <http://www.chiltern.com>.

### **About Eltoprazine**

[Eltoprazine](#) is a small molecule 5HT<sub>1A/1B</sub> partial agonist in clinical development for the treatment of Parkinson's disease levodopa-induced dyskinesia (PD-LID) and adult attention deficit hyperactivity disorder (ADHD). Eltoprazine has been evaluated in over 680 human subjects to date, and has a well-established safety profile. Eltoprazine was originally developed by Solvay Pharmaceuticals for the treatment of aggression. Upon Solvay's merger with Abbott Pharmaceuticals, the eltoprazine program was out-licensed to PsychoGenics. PsychoGenics licensed eltoprazine to Amarantus following successful proof-of-concept trials in PD-LID and adult ADHD.

### **About Parkinson's Disease and Levodopa-Induced Dyskinesia (PD-LID)**

Parkinson's disease is a chronic, progressive neurodegenerative disorder that causes motor symptoms such as tremors, rigidity and slowed movements as well as non-motor symptoms including cognitive impairment, mood disorders and autonomic dysfunction. The Parkinson's Disease Foundation estimates that there are approximately one million people living with Parkinson's disease in the United States and seven to 10 million PD patients worldwide. The most commonly prescribed treatments for Parkinson's disease are levodopa-based therapies. In the body, levodopa is converted to dopamine to replace the dopamine loss caused by the disease. As dopamine neurons in the brain are lost the therapeutic efficacy of levodopa attenuates, and increased use is associated with a side effect of dyskinesias. These are involuntary, uncontrollable and often exaggerated and jerky movements. They are distinct from the static, rhythmic tremor as a symptom of Parkinson's disease. Levodopa-

induced dyskinesia can be severely disabling, rendering patients unable to perform routine daily tasks.

### **About Amaranthus BioScience Holdings, Inc.**

Amarantus BioScience Holdings (AMBS) is a biotechnology company developing treatments and diagnostics for diseases in the areas of neurology, psychiatry, ophthalmology and regenerative medicine. AMBS' Therapeutics division has development rights to eltoprazine, a Phase 2b ready small molecule indicated for Parkinson's disease levodopa-induced dyskinesia, adult ADHD and Alzheimer's aggression, and owns the intellectual property rights to a therapeutic protein known as mesencephalic-astrocyte-derived neurotrophic factor (MANF) and is developing MANF-based products as treatments for brain and ophthalmic disorders. AMBS' Diagnostics division owns the rights to MSPrecise<sup>®</sup>, a proprietary next-generation DNA sequencing (NGS) assay for the identification of patients with relapsing-remitting multiple sclerosis (RRMS) at first clinical presentation, has an exclusive worldwide license to the Lymphocyte Proliferation test (LymPro Test<sup>®</sup>) for Alzheimer's disease, which was developed by Prof. Thomas Arendt, Ph.D., from the University of Leipzig, and owns intellectual property for the diagnosis of Parkinson's disease (NuroPro). AMBS also owns the discovery of neurotrophic factors (PhenoGuard<sup>™</sup>) that led to MANF's discovery.

For further information please visit [www.Amarantus.com](http://www.Amarantus.com), or connect with the Company on [Facebook](#), [LinkedIn](#), [Twitter](#) and [Google+](#).

### **Forward-Looking Statements**

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

CONTACT: Investor and Media Contact:  
Jenene Thomas  
Jenene Thomas Communications, LLC  
Investor Relations and Corporate Communications Advisor  
T: (US) 908.938.1475  
E: [jenene@jenenethomascommunications.com](mailto:jenene@jenenethomascommunications.com)

Source: Amaranthus BioScience Holdings, Inc.