



## **Interim Study Data Demonstrate Eligen(R) B12 Oral Formulation Achieves Comparable Results to B12 Injection**

### ***Needleless Option One Step Closer for Millions of Patients with B12 Deficiency***

CEDAR KNOLLS, N.J., Nov 02, 2009 (BUSINESS WIRE) -- Emisphere Technologies, Inc. (OTC BB:EMIS) today announced that interim data from an ongoing study demonstrated its high-dose oral Eligen<sup>(R)</sup> B12 (1000mcg) performed as well as or better than B12 injections in individuals with Vitamin B12 deficiency. Normal levels of serum B12 and active B12 were achieved by 100 percent of those study participants who have currently taken Eligen<sup>(R)</sup> B12 (1000mcg) 15 days into the 90-day study when the first blood samples were taken.

As part of an interim analysis in this randomized, multi-center study, levels of serum B12, active B12, homocysteine and methyl malonic acid were measured on day 15, at which point a total of 18 participants (8 on IM injection and 10 on oral) had received either five 1000mcg intramuscular injections of Vitamin B12 or once daily tablets of oral Eligen<sup>(R)</sup> B12 (1000mcg). Study subjects taking Eligen<sup>(R)</sup> B12 also saw a marked decrease in homocysteine, which is a known risk factor for cardiovascular disease.

"We are excited and encouraged by the speed with which the individuals in the oral Eligen<sup>(R)</sup> B12 group were able to reach normal levels of serum B12 and active B12," said Michael V. Novinski, President and Chief Executive Officer, Emisphere Technologies. "We believe these interim results illustrate the enormous potential of the Eligen<sup>(R)</sup> Technology, which we look forward to applying to other poorly absorbed nutrients."

"These interim data with high-dose oral Eligen<sup>(R)</sup> B12 open up a real potential for replacing an injection with an oral, which has never been done before with B12 due to challenges with absorption and bioavailability," said Dr. Michael Rothkopf, Director of Atlantic Health's Metabolic Medicine and Weight Control Center in Morristown, NJ and an investigator in the study. "Availability of a needle free but highly efficacious B12 product would be a significant benefit for the millions of individuals under medical supervision for B12 deficiency."

This clinical study with Eligen<sup>(R)</sup> B12 (1000mcg) is expected to be completed within the first half of 2010. Upon completion of this study the high dose Eligen<sup>(R)</sup> B12 product (1000 mcg) should compete directly with the standard high dose B12 injection currently administered to millions of individuals under medical supervision for B12 deficiency. It is estimated that between 30 and 40 million high dose injections of B12 are given each year in the U.S. alone and over 250 million such injections are given worldwide.

Emisphere's Eligen<sup>(R)</sup> B12 product (1000mcg) is planned to be available in 2010.

Oral Eligen<sup>(R)</sup> B12 and the foregoing statements have not been evaluated by the Food and Drug Administration. Oral Eligen<sup>(R)</sup> B12 is not intended to diagnose, treat, cure, or prevent any disease.

### **About Vitamin B12**

Vitamin B12 is necessary for the formation and maturation of red blood cells and for the synthesis of DNA. It is also necessary for normal nerve function and assists in the body's immune system. B12 deficiency is a major health concern that can lead to anemia, fatigue, weakness, loss of appetite, neurological changes, confusion and dementia.

Unlike most vitamins, B12 is stored in the liver until it is needed by the body. Vitamin B12 is adequately absorbed in the bodies of healthy people, but many older people lose their natural ability to absorb the nutrient. Younger individuals may also have difficulty absorbing B12 as a result of taking certain medications or chemotherapy. Those at highest risk for B12 deficiency include anyone over age 60, those with GI tract disorders such as Crohn's Disease, Irritable Bowel Syndrome or Celiac Disease, individuals who have had bypass surgery, those undergoing chronic therapy with absorption-altering drugs, alcoholics and vegetarians/vegans. It is estimated that between 30 and 40 million high-dose injections of B12 are given each year in the U.S. alone and that more than 250 million such injections are given worldwide.

### **About Emisphere Technologies, Inc.**

Emisphere is a biopharmaceutical company that focuses on a unique and improved delivery of therapeutic molecules or nutritional supplements using its proprietary Eligen<sup>(R)</sup> Technology. The Eligen<sup>(R)</sup> Technology can be applied to the oral route of administration as well as other delivery pathways such as buccal, rectal, inhalation, intra-vaginal or transdermal. The company's website is [www.emisphere.com](http://www.emisphere.com).

Safe Harbor Statement Regarding Forward-Looking Statements

*The statements in this release and oral statements made by representatives of Emisphere relating to matters that are not historical facts (including without limitation those regarding the timing or potential outcomes of research collaborations or clinical trials, any market that might develop for any of Emisphere's product candidates and the sufficiency of Emisphere's cash and other capital resources) are forward-looking statements that involve risks and uncertainties, including, but not limited to, the likelihood that future research will prove successful, the likelihood that any product in the research pipeline will receive regulatory approval in the United States or abroad, the ability of Emisphere and/or its partners to develop, manufacture and commercialize products using Emisphere's drug delivery technology, Emisphere's ability to fund such efforts with or without partners, and other risks and uncertainties detailed in Emisphere's filings with the Securities and Exchange Commission, including those factors discussed under the caption "Risk Factors" in Emisphere's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed on March 16, 2009, and as amended on Form 10-K/A as filed on April 30, 2009, and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009, filed on May 7, 2009, and as amended on Form 10-Q/A, as filed on October 21, 2009, and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, filed on August 10, 2009, and as amended on Form 10-Q/A, as filed on October 21, 2009.*

SOURCE: Emisphere Technologies, Inc.

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