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**LEADING RESEARCH INSTITUTIONS INITIATE MECHANISM OF ACTION STUDIES ON
VAGUS NERVE STIMULATION (VNS) THERAPY FOR TREATMENT-RESISTANT
DEPRESSION**

**Researchers at Duke, Emory and University of Texas Health Science Center to Study
Effects of VNS Therapy on the Brain**

HOUSTON, Texas, May 23, 2006 – Cyberonics, Inc. (NASDAQ:CYBX) today announced the initiation of three important studies designed to add to the growing body of evidence supporting the unique mechanism of action of VNS Therapy™ in treatment-resistant depression (TRD). The studies, taking place at Duke University Medical Center, Emory University and University of Texas Health Science Center, are designed to identify areas of the brain activated by acute and long-term VNS Therapy and further establish the rationale for the unique long-term sustained responses that have been reported with VNS Therapy in TRD. The VNS Therapy Mechanism of Action Advisory Board, chaired by Charles B. Nemeroff, M.D., Ph.D., Emory University, is providing expert leadership in the development and implementation of a long-term mechanism of action research plan to identify opportunities to improve the effectiveness of VNS Therapy and prioritize new indications development.

"In addition to representing an important novel therapeutic modality, VNS Therapy is a research tool that offers the hope of better understanding and potentially treating a variety of brain diseases. I look forward to working very closely with the other researchers and Cyberonics to execute research initiatives designed to elicit meaningful information regarding the unique mechanism of action of VNS Therapy in TRD," said Dr. Nemeroff. "We aim to use a variety of studies that will provide comprehensive information on brain areas affected by VNS, optimal stimulation parameters, the role of VNS Therapy in different patient populations and ultimately the identification of biomarkers of risk and response. The results generated from these studies will provide significant advances in clinical care for patients with chronic and recurrent depression."

Alan Frazer, Ph.D., Professor and Chairman, Department of Pharmacology, University of Texas Health Science Center at San Antonio, San Antonio, TX, is leading one of the studies focused on defining the areas of the brain activated by acute and chronic vagus nerve stimulation to determine how stimulation intensity affects the pattern of brain activation. These results will add to the data regarding which brain areas are affected during vagus nerve stimulation and as such contribute to the understanding of the anti-depressant activity of VNS Therapy.

“Preliminary study results indicate vagus nerve stimulation produces a distinct pattern of neural activation that includes brain regions of the central nervous system that have been implicated in affective disorders,” said Dr. Frazer. “This research is providing very useful information about the unique pattern of neuronal activation and this will lead to a greater understanding of how this treatment provides antidepressant activity in a way that is different from other antidepressant treatments.”

The study at Duke University Medical Center, led James O. McNamara, M.D., is designed to clarify the cellular and molecular mechanisms by which vagus nerve stimulation exerts its antiepileptic and antidepressant effects. Scientists at Duke expect to map proteins in the brain to reflect a pattern before and after vagus nerve stimulation. This study will yield results focused on the broader implications of vagus nerve stimulation to the central nervous system with an ultimate goal of developing a mechanism for elucidating which of the cellular and molecular mechanisms modulated by VNS are responsible for antidepressant effects.

Emory University’s study, led by Michael J. Owens, Ph.D., Associate Professor of Psychiatry & Behavioral Sciences, is related to the long-term effects of vagus nerve stimulation on neurotransmitter regulation of the hypothalamic-pituitary-adrenal (HPA) axis in an animal model that mimics stress- or trauma-induced depression and responds to other effective antidepressant treatments.

“Cyberonics’ commitment to post-market research remains a top priority,” said Richard L. Rudolph, M.D., Cyberonics’ Vice President, Clinical and Medical Affairs and Chief Medical Officer. “We are confident that the results of these studies will yield beneficial data that will enhance our understanding of the unique mechanism of action of VNS Therapy for patients with TRD. Contributing to this understanding will continue to provide physicians with the most comprehensive data available so that, in turn, they provide the best treatment strategies for their patients.”

The FDA approved VNS Therapy as an adjunctive long-term treatment of chronic or recurrent depression for patients 18 years of age or older who are experiencing a major depressive episode and have not had an adequate response to four or more adequate antidepressant treatments. VNS Therapy is the first FDA-approved implantable device-based treatment for depression and the first treatment developed, studied, approved and labeled specifically for patients with treatment-resistant depression (TRD). Recent peer-reviewed data published in *Biological Psychiatry* and the *Journal of Clinical Psychiatry* confirm the association of VNS Therapy with significant antidepressant benefits that are sustained and/or increase over time for patients with chronic or recurrent treatment-resistant depression.

VNS Therapy is also FDA-approved as an adjunctive therapy used to reduce the frequency of seizures in adults and adolescents over 12 years of age with partial onset seizures that are refractory to antiepileptic medications. In addition to treatment-resistant depression and pharmacoresistant epilepsy indications, VNS Therapy is at various stages of research as potential treatments for anxiety disorders, Alzheimer’s

disease, bulimia, chronic headache/migraine and morbid obesity. In total, more than 40,000 patients have accumulated over 100,000 patient years of experience with VNS Therapy confirming that VNS Therapy is safe, effective and cost effective.

To date, more than 5,000 psychiatrists have been trained at Cyberonics-sponsored medical education programs, 2,650 psychiatrists have identified over 10,000 potential VNS patients, 180 different payers have approved individual case by case use of VNS Therapy, 1,100 patients have been treated with VNS Therapy and approximately 4,700 patients have been denied access to VNS Therapy by their insurance providers. The Company is actively working with psychiatrists, patients, patient advocacy organizations, employers and payers to provide psychiatrists and patients with TRD the same universal access to VNS Therapy enjoyed by neurologists and their epilepsy patients through broad based coverage policies for the past six years.

ABOUT VNS THERAPY AND CYBERONICS

Information on Cyberonics, Inc. and VNS Therapy is available at www.cyberonics.com and www.vnstherapy.com.

SAFE HARBOR STATEMENT

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended. These statements can be identified by the use of forward-looking terminology, including "may," "believe," "will," "expect," "anticipate," "estimate," "plan," "intend," and "forecast," or other similar words. Statements contained in this press release are based upon information presently available to us and assumptions that we believe to be reasonable. We are not assuming any duty to update this information should those facts change or should we no longer believe the assumptions to be reasonable. Investors are cautioned that all such statements involve risks and uncertainties, including without limitation, statements concerning the conduct of clinical studies intended to provide a better understanding of the mechanism of action for VNS Therapy and the results of such studies actually providing greater understanding of the mechanism of action for VNS Therapy and resulting in advances in clinical care for patients. Important factors that may cause actual results to differ include, but are not limited to: continued market acceptance of VNS Therapy and sales of our product; the development and satisfactory completion of clinical trials and/or market test and/or regulatory approval of VNS Therapy for the treatment of Alzheimer's disease, anxiety, or other indications; adverse changes in coverage or reimbursement amounts by third-parties; intellectual property protection and potential infringement claims; maintaining compliance with government regulations and obtaining necessary government approvals for new applications; product liability claims and potential litigation; reliance on single suppliers and manufacturers for certain components; the accuracy of management's estimates of future expenses and sales; and other risks detailed from time to time in the Company's filings with the Securities and Exchange Commission (SEC). For a detailed discussion of these and other cautionary statements,

please refer to Cyberonics' most recent filings with the SEC, including its Form 10-K for the fiscal year ended April 29, 2005.

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