University of Washington's Dr. Joo Ha Hwang to Conduct Proof of Concept Study

The Associated Press

(http://www.celsion.com)

(http://www.fusfoundation.org)

Celsion Corporation (NASDAQ: CLSN) and the Focused Ultrasound Foundation announced today their support for preclinical studies designed to explore the use of ThermoDox@, Celsion's Phase III, proprietary, heat-activated liposomal encapsulation of doxorubicin, in combination with MR-guided high intensity focused ultrasound (HIFU) for the treatment of pancreatic cancer. The studies are being conducted at the University of Washington School of Medicine by Joo Ha Hwang, M.D., Ph.D., Director, Endoscopic Research, Associate Professor of Medicine and Adjunct Associate Professor of Bioengineering and Radiology.

Celsion is supporting Dr. Hwang's research with ThermoDox@ supplies, and the Foundation is funding the preclinical study, "MR-guided HIFU Enhanced Targeted Drug Delivery for Treatment of Pancreatic Cancer."

A healthcare research and advocacy organization, the Focused Ultrasound Foundation solicits research proposals to address areas of unmet medical needs where HIFU may provide benefit. Before awarding funding to Dr. Hwang, the Foundation had identified pancreatic and liver cancers as potential clinical applications for HIFU and designed a research roadmap to address a set of preclinical, mechanistic and

technical questions for the development of these applications.

"We are excited about Dr. Hwang's research and the new treatments he is pioneering. As always, our goal is to save and improve lives by supporting the development of new focused ultrasound therapies for many of today's most deadly and debilitating conditions," said Arik Hananel, M.D., Scientific and Medical Director of the Focused Ultrasound Foundation.

The University of Washington School of Medicine research is expected to include in vitro experiments to confirm the ability of HIFU to target high concentrations of doxorubicin in proprietary pancreatic cancer cell lines, and in vivo studies to assess the response to these tumors treated using ThermoDox@ with and without HIFU-induced hyperthermia. The optimal HIFU exposure duration needed to maximize doxorubicin concentration will also be evaluated, where ThermoDox@ will be compared against other chemotherapeutic agents used in combination with HIFU in mouse tumor models.

"Focused ultrasound has the potential to make an enormous impact on the treatment of pancreatic cancer, both as a means of ablating tumors and for the enhancement of therapeutic drug delivery to these tumors," said Dr. Hwang. "The thermal drug targeting capability of ThermoDox makes it the ideal candidate for a combination treatment approach, one drawing from the benefits of both treatment modalities to provide what may be an innovative option for this large and urgent unmet medical need. I look forward to studying the combination in a unique animal

model, one which effectively recapitulates the human disease, then moving rapidly into the clinic."

"We are pleased and excited to support Dr. Hwang's research and to study ThermoDox's potential in a disease with a staggering rate of mortality and few treatment options," said Michael H. Tardugno, Celsion's President and Chief Executive Officer. "In preclinical models, ThermoDox combined with HIFU has already demonstrated strong proof of concept, rationale and support for clinical studies in certain cancers, including bone cancer. This further illustrates ThermoDox's broad potential to enhance the benefit of multiple heat-based therapies, including HIFU and radiofrequency ablation, across a spectrum of cancers."

Through a joint research agreement, Celsion is also working with Philips Healthcare, a division of Royal Philips Electronics, to develop treatments for bone cancer using ThermoDox@ and HIFU.

About Pancreatic Cancer

According to the American Cancer Society, in 2011, an estimated 44,030 Americans were diagnosed with pancreatic cancer in the U.S., and over 37,660 died from the disease. Pancreatic cancer is the 4th leading cause of cancer-related death in the United States, with the highest mortality rate of all major cancers and a five year survival rate of only 6%. Pancreatic cancer is one of the few cancers for which survival has not improved substantially over nearly 40 years.

About ThermoDox@

ThermoDox@ is a proprietary heat-activated liposomal encapsulation of

doxorubicin, an approved and frequently used oncology drug for the treatment of a wide range of cancers. Localized mild hyperthermia (39.5 - 42 degrees Celsius) created by focused heat energy releases the entrapped doxorubicin from the liposome. This delivery technology enables high concentrations of doxorubicin to be deposited preferentially in a targeted tumor.

For primary liver cancer, ThermoDox@ is being evaluated in a 700 patient global Phase III study at 79 clinical sites under an FDA Special Protocol Assessment. The study is designed to evaluate the efficacy of ThermoDox@ in combination with radio frequency ablation (RFA) when compared to patients who receive RFA alone as the control. The primary endpoint for the study is progression-free survival (PFS) with a secondary confirmatory endpoint of overall survival. Additional information on the Company's ThermoDox@ clinical studies may be found at

www.clinicaltrials.gov(http://ctt.marketwire.com/?release=880697&id=1547101&type=1&url=http%3a%2f%2fwww.clinicaltrials.gov%2f).

About Focused Ultrasound

An early-stage medical technology with the potential to revolutionize the treatment of many life threatening and disabling conditions, focused ultrasound uses concentrated acoustic energy to treat tissue deep in the body while leaving surrounding healthy areas intact. Potentially, focused ultrasound could be a breakthrough in noninvasive surgery, serve as an alternative or complement to radiation therapy and enable the delivery of chemotherapeutics and other drugs at higher

concentrations to precise targets with less toxicity. Researchers around the world are investigating the technology's use in treating many forms of cancer -- including bone, brain, breast, liver, pancreas, prostate and thyroid -- and neurological conditions such as essential tremor, Parkinson's disease, epilepsy, obsessive compulsive disorder and stroke. In the United States, focused ultrasound treatment for uterine fibroids has been approved by the FDA. Other approved treatments are available abroad.

About The Focused Ultrasound Foundation

Based in Charlottesville, Virginia, the Focused Ultrasound Foundation was created to improve the lives of millions of people worldwide by accelerating the development and adoption of focused ultrasound therapies. The Foundation works to clear the path to global adoption of these therapies by coordinating and funding research and educational activities, creating partnerships and fostering collaboration among stakeholders, and building awareness of "medicine's best kept secret." The Foundation is dedicated to ensuring that focused ultrasound finds its place as a mainstream therapy for cancer, brain tumors, Parkinson's disease, epilepsy, stroke and other life-threatening conditions within years, not decades. Since its establishment in 2006, the Foundation has become the largest non-governmental source of funding for focused ultrasound research. The Foundation is supporting clinical studies in essential tremor and brain tumors, as well as pending clinical trials for Parkinson's

disease, breast cancer and epilepsy. Complete information about the

Foundation and its work can be found online at

www.fusfoundation.org(http://ctt.marketwire.com/?release=880697&id=1547104&type=1&url=http%3a%2f%2fwww.fusfoundation.org%2f).

About Celsion Corporation

Celsion is a leading oncology company dedicated to the development and

commercialization of innovative cancer drugs including tumor-targeting

treatments using focused heat energy in combination with

heat-activated liposomal drug technology. Celsion has research,

license, or commercialization agreements with leading institutions

including the National Institutes of Health, Duke University Medical

Center, University of Hong Kong, the University of Pisa, the UCLA

Department of Medicine, Kyungpook National University Hospital and the

Beijing Cancer Hospital. For more information on Celsion, visit our

website:

http://www.celsion.com(http://ctt.marketwire.com/?release=880697&id=1547107&type=1&url=http%3a%2f%2fwww.celsion.com%2f).

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