



**Embargoed until 12:00 am Thursday July 10, 2008**

## **Mithridion Announces Commencement of Phase I Clinical Trial of Investigational Drug for Alzheimer's Disease**

**Madison, Wis., Thursday July 10, 2008** - - Mithridion, Inc., a private drug discovery and development company focusing on drugs for Alzheimer's disease and other serious Central Nervous System (CNS) disorders, announces that it has commenced a Phase I clinical trial of its investigational drug MCD-386. This investigational drug was acquired as part of the recently announced merger of Cognitive Pharmaceuticals, Ltd. into Mithridion. The Investigational New Drug application to the U.S. Food and Drug Administration cleared on July 2.

MCD-386 is a small-molecule investigational drug aimed at improving brain function and stopping or slowing down the disease processes that cause brain cell death in Alzheimer's disease. The current clinical trial is a double blind, placebo controlled, single ascending dose study in normal human subjects to assess the safety, tolerability and pharmacokinetics of MCD-386. In common with other first-time-in-human studies, patients suffering from Alzheimer's disease will not be enrolled in this study, nor will efficacy be investigated – these will be part of planned future Phase II studies, which may begin after successful completion of Phase I studies.

“We believe that MCD-386 is an exciting potential drug, targeted at pressing unmet clinical needs of Alzheimer's disease sufferers,” said Trevor M. Twose, Ph.D., the company's Chief Executive. “It is a second generation drug in this class of selective muscarinic M1 agonists that showed promise in clinical trials. It has the potential not only to overcome side effect problems of first generation drugs, but also to be more efficacious,” he added.

Five million Americans suffer from Alzheimer's disease today, and the number will grow as baby-boomers age. The market for Alzheimer's drugs exceeds \$4 billion, but is currently underserved, and may grow to greater than \$10 billion with the development of drugs that are more effective.

In preclinical laboratory tests, MCD-386 appears to replace deficient brain acetylcholine activity caused by Alzheimer's disease through selective activation of muscarinic M1 type receptor subtypes and may also activate alpha-secretase enzymes. MCD-386's pharmacological actions should improve memory and cognition with improved tolerability compared to previously tested muscarinic drugs, and may also reduce or prevent the loss of brain cells by preventing the formation of amyloid beta in patients with Alzheimer's disease. The various actions of acetylcholine at muscarinic receptors are mediated by five slightly different receptors. MCD-386 is highly selective for the M1-type receptor involved in memory, cognition and alpha-secretase action. The challenge has been to avoid side effects caused by actions of acetylcholine mediated by the M2-M5 receptor types. First generation M1 drugs demonstrated promising beneficial effects in clinical trials, but suffered from side-effects,

believed to be caused by insufficient M1 activity and insufficient M1 selectivity. In preclinical laboratory tests, MCD-386 appeared to be superior to first-generation drugs of this type, both in M1 activity and M1 selectivity. Four of the five currently approved drugs slow down the breakdown of acetylcholine, thereby boosting its concentration to overcome the deficiency in Alzheimer's. However, unlike MCD-386, they boost all actions of acetylcholine, which increases side-effects.

The drug was developed with technology invented in the laboratories of Professor William S. Messer, Jr., Ph.D., of the College of Pharmacy, University of Toledo, Ohio. Mithridion has an exclusive worldwide license to this technology, from the University of Toledo. Bill Messer advises the company, serving as its Chief Scientist. The technology is being used by Mithridion to design and develop additional drug candidates for other CNS disorders in addition to Alzheimer's disease.

Mithridion has its headquarters and preclinical drug research laboratories in Madison, Wis., and has its clinical drug development operations in Toledo, Ohio. The company's semi-virtual drug development team is drawing on experts and specialist service providers in Wisconsin, Ohio, Michigan and Indiana, to complement its in house drug development resources. "We have been able to build a strong core team from within the Midwest, positioning the company to develop a portfolio of drug discoveries from the region's strong research universities," said Twose. "The region has a rich history of drug research and development, which, together with rapidly growing availability of risk capital, creates the potential to build and grow a great company here," he added.

-ends-

**For further information, please contact:**

Trevor M. Twose, Ph.D.  
Chief Executive Officer  
Mithridion, Inc.  
505 Science Drive, Suite C  
Madison, WI 53711  
Direct telephone: (608) 443-2430