May 9, 2007

Oxis International Antioxidant Compound L-ergothioneine Increases Sperm Cell Viability by 15-20% in Pre-Clinical and Clinical Studies

Ability to Protect Cells against Oxidative Damage Applicable in Fields of Stem Cells, Fertility, and Cloning

MONTVALE, N.J.--

Oxis International Inc. (OTCBB: OXIS) announced today that its lead antioxidant compound L-ergothioneine (ERGO) showed dramatic results in preserving function of sperm cells undergoing freezing and thawing. These experiments were designed by an expert in equine fertility, Lisa Metcalf, MS DVM Diplomate, American College of Theriogenology and executed in independent animal fertility laboratories. ERGO increased sperm cell viability by 15-20% in pre-clinical and clinical studies as measured by total and progressive motility, when added to known cell extender preservatives in general use in the fertility field. Percentage increases of this magnitude are significant considering the large numbers of cells involved.

These results dramatically indicate new potential applications for ERGO in various fields in which cell preservation is crucial, including, but not limited to, applications involving stem cells, sperm cells, oocytes (ova), chondrocytes (cartilage), and cell cloning Oxis has filed protective patents to cover these potential new applications for ERGO.

"I am extremely encouraged by these promising preliminary results suggesting that ERGO has significant potential to enhance fertility. The broad applications for this compound suggest that additional testing should be commenced immediately to determine whether these results can be replicated," said Dr. Metcalf, who currently serves as the Oregon Veterinary Racing Commissioner. She is also the immediate Past-President of the Northwest Equine Practitioners Association and on the Chairs Council of the Oregon Humane Society and is an internationally recognized speaker and author.

The basic concept underlying this experiment is that all mammalian cells, whether embryonic or adult, undergo oxidative stress when removed from the host body or organ. The host

under normal conditions, to maintain cell integrity and viability, neutralizes oxidative damage through cellular antioxidants. When the balance shifts to a level that cannot be neutralized, apoptosis, or programmed cell death occurs. Freezing and thawing of collected sperm cells represents an excellent oxidative stress model to test the ERGO antioxidant hypothesis.

ERGO is a unique, naturally occurring antioxidant that is abundant in most plants and animals. ERGO cannot be synthesized by humans and therefore is available only from dietary sources. OXIS was the first company to develop a patented, synthetic process for the manufacture of pure ERGO. The Oxis proprietary manufacturing process has been approved in North America, Japan and Western Europe. A significant role for ERGO in cellular function is also shown by the recent discovery in humans of a transport system specific only for ERGO ("Discovery of the Ergothioneine Transporter"; D. Grundemann et al; Proceedings of the National Academy of Sciences, USA, 2005 April 5; 102 (14): 5256-5261)

"The ability to harvest, propagate, and maintain human cells/cell lines, whether from an embryo or adult donor, underlies the basis of any successful cell preservation system and the broad therapeutic applications," stated Marvin S. Hausman M.D., President and CEO, of OXIS. "These results suggest that ERGO has the potential to prolong cellular life through its potent antioxidant activity and may represent enabling technology, especially for the stem cell industry. OXIS intends to offer licenses to this technology to assist any company involved in cell harvest and preservation."

The ability of ERGO to potentially prolong cell life and cell function has applications beyond cell preservation. OXIS is currently developing and evaluating diagnostic proprietary biomarkers of oxidative stress which can be specifically connected to antioxidant nutritional supplementation with application to athletic performance as well as patients with specific diseases.

Dr. Metcalf received her DVM degree from The Virginia-Maryland Regional College of Veterinary Medicine and her MS in Endocrinology from UC Davis. She is a member of the Phi Zeta Veterinary Honor Society and received the Robert M. Hogsett Memorial Award for clinical proficiency, professionalism, and leadership. Dr Metcalf is board-certified in theriogenology, the specialty practice of animal reproduction.

About OXIS and BioCheck:

OXIS International, Inc. develops technologies and products to research, diagnose, treat and prevent diseases of oxidative stress associated with damage from free radical and reactive oxygen species and the related increased inflammation that accompanies oxidative stress. OXIS presently holds the rights to four therapeutic classes of compounds in the treatment of oxidative stress, and has focused commercialization programs in clinical cardiovascular markers, including MPO (myeloperoxidase) and GPx (glutathione peroxidase), as well as the super potent antioxidant, Ergothioneine, that is planned to be introduced as an over-the-counter nutraceutical supplement. OXIS's customers include leading pharmaceutical companies such as Pfizer, Glaxo SmithKline and Genzyme and universities such as Baylor College of Medicine, University of Minnesota, Virginia School of Technology, distributors and government laboratories. OXIS has acquired a 51% interest in BioCheck, with the option to purchase the remaining 49%.

BioCheck is a provider of high quality enzyme immunoassay research services and

products, and a leading provider of immunoassay kits for cardiac and tumor biomarkers, infectious diseases, thyroid function, steroids, and fertility hormones. BioCheck operates a 15,000 square-foot, U.S. Food and Drug Administration (FDA) certified cGMP, and ISO device-manufacturing facility in Foster City, California.

More information about OXIS, BioCheck and their products, services as well as current SEC filings may be obtained by visiting http://www.oxisresearch.com and http://www.biocheckinc.com.

The statements in this press release that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including, without limitation, statements regarding our expectations, objectives, anticipations, plans, hopes, beliefs, intentions or strategies regarding the future. Factors that could cause actual results to differ materially from the forward-looking statements include risks and uncertainties indicated in the company's filings with the Securities and Exchange Commission. It is important to note that actual outcomes could differ materially from those in such forward-looking statements.

Source: Oxis International Inc.