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**FOR IMMEDIATE RELEASE**

**PHARMATHENE AWARDED \$1.7 MILLION NIH GRANT FOR PROTEXIA®**

*Funding Supports Evaluation of Protexia for Use as a Therapeutic  
Medical Countermeasure Against Nerve Agent Toxicity*

**ANNAPOLIS, MARYLAND, October 18, 2006** — PharmAthene, Inc., a leading biodefense company specializing in the development and commercialization of medical countermeasures against chemical and biological terrorism, announced today that it has been awarded a grant from the National Institutes of Health (NIH) Countermeasures Against Chemical Threats (CounterACT) Research Network totaling approximately \$1.7 million to support continued development of the Company's broad spectrum chemical nerve agent therapy, Protexia®.

Protexia is a recombinant form of human butyrylcholinesterase (BChE), a naturally occurring protein found in minute quantities in blood. BChE functions as a natural bioscavenger, like a sponge, to absorb toxins such as organophosphorous (OP), nerve agents (sarin, soman, tabun, VX) and certain pesticides, before they can cause irreversible neurological damage and death. Protexia is being developed by PharmAthene as a pre and post-exposure therapy for military and civilian victims of a chemical nerve agent attack.

“Based on an impressive collection of preclinical animal efficacy data, which demonstrate that Protexia provides enhanced survival after exposure to nerve agents without neurological impairment, we believe it has excellent potential to become the superior choice for military and civilian protection against nerve agent toxicity,” commented David P. Wright, President and Chief Executive Officer of PharmAthene. “The funding announced today from the NIH, in addition to a recently announced contract from the Department of Defense, which provides up to \$213 million in funding for advanced development of Protexia across multiple indications, offers important validation for Protexia and our Company's biodefense capabilities. We look forward to rapidly advancing the development of Protexia to meet the urgent biosecurity needs of our Nation and Allies.”



Preclinical research conducted by PharmAthene's development partners, the US Army Medical Research Institute of Chemical Defence (USAMRICD) and DRDC Suffield, Defence Research and Development Canada, have demonstrated the capability of Protexia to protect laboratory animals from the toxic effects of chemical nerve agents.

In these studies, pre-treatment with rBChE provided 100% survival against the nerve agents VX and soman. In post-exposure therapeutic studies, administration of rBChE following nerve agent exposure resulted in enhanced survival compared to control animals. Results from several of these studies were recently reported by USAMRICD and DRDC at the 2006 Bioscience Review meeting.

While the utility of BChE to protect against nerve agent exposure is well documented, a major limitation in its development has been the inability to produce it in commercial volumes due to limited raw material availability, low levels of the enzyme in blood, and low production yields using traditional biotechnology methods. To overcome these limitations, PharmAthene has developed a recombinant form of human BChE, (rBChE), utilizing transgenic expression in goats which enables substantially higher production yields. PharmAthene believes that its transgenic technology will have the capacity to produce sufficient rBChE for both military and civilian defence.

The goal of the CounterACT program is to develop novel therapeutic agents to treat large numbers of persons exposed to nerve agents as a result of a mass civilian terrorist attack. Funding provided to PharmAthene under the grant will be used to conduct additional preclinical studies to evaluate the efficacy of Protexia as a post-exposure therapy for lethal exposure to nerve agents.

#### **About Protexia®: Recombinant Human Butyrylcholinesterase (rBChE)**

Protexia is a form of recombinant human butyrylcholinesterase (rBChE), a potent organophosphorus (OP) scavenger protein produced in the milk of transgenic goats, which is being developed for use as a prophylactic against acute organophosphorus (OP) nerve agent toxicity.

#### **About Chemical Weapons**

Organophosphorus nerve agents, or anti-cholinesterase agents, were discovered in the 1930s following intensive research into new insecticides. Their discovery represents the beginning of modern chemical warfare. These agents cause toxicity by binding to and inhibiting acetylcholinesterase, an enzyme in the body that is essential for nervous system function, leading to increases in acetylcholine and "cholinergic crisis" that can cause loss of muscle control, respiratory failure, paralysis, convulsions, permanent brain damage and eventually death.

These so-called nerve gases, which are actually all liquids at room temperature, are lethal far more quickly and in far lower concentrations than other classical chemical warfare agents such as vesicants, choking agents and blood agents, and are effective both when inhaled and when absorbed through the skin. Nerve agents can be classified as either G-agents (sarin, soman, tabun) or V-agents (VX), both of which are exceedingly toxic.



**About PharmAthene, Inc.**

PharmAthene, a privately-held biotechnology company, is dedicated to the rapid development of important and novel medical countermeasures to address biological pathogens and chemicals that may be used as weapons of bioterror. PharmAthene's lead programs include Valortim™, intended for the prevention and treatment of anthrax, which is being co-developed with Medarex, Inc. (NASDAQ: MEDX), and Protexia®, intended to prevent and treat nerve agent toxicity. PharmAthene is located in the Chesapeake Innovation Center in Annapolis, MD, America's first business accelerator for the homeland and national security sectors. PharmAthene has been successful in obtaining U.S. Government and Venture Capital funding to finance the development of its portfolio products. For more information on PharmAthene, please visit [www.PharmAthene.com](http://www.PharmAthene.com).

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