



**MODIGENE ANNOUNCES POSITIVE RESULTS OF PILOT TOXICITY
STUDY OF ITS LONG-ACTING HUMAN GROWTH HORMONE hGH-CTP**

***—Single Injection in Primates Containing 1,000-Times the
Dosage Recommended for Humans Shows No Adverse Effects—***

***—Half-Life and AUC Support the Potential for Weekly or
Bi-Monthly Dosing Frequency—***

Nes-Ziona, Israel -- January 15, 2009 -- Modigene Inc. (OTCBB: MODG) today reported results from a pilot toxicity study in primates designed to assess the safety of hGH-CTP, its long-acting human growth hormone (hGH), as well as to provide preliminary information on the approximate injection frequency that will be needed in human patients. The study was designed to elicit potential adverse effects from a single, very large dose of hGH-CTP, also known as MOD-4023. No adverse effects were observed, and the data from this study also support once-weekly or bi-monthly injection frequency in humans.

The pilot study included a group of primates that received a single injection of hGH-CTP containing a dose that was 1,040 times the daily dose of growth hormone recommended for use in human patients. No adverse effects were observed in any of the primates. In addition, the half-life and AUC (area under the curve) of hGH-CTP as measured in primates support a potential once-weekly or bi-monthly injection frequency in humans. This would replace the multiple injections per week that are currently required, as there is presently no long-acting hGH on the market.

“Our long-acting hGH-CTP has exhibited excellent safety in all preclinical studies to date, so we were not surprised by these first data in primates showing that huge single doses of hGH-CTP appear very safe,” said Dr. Avri Havron, CEO of Modigene. “We also were pleased to report a significant increase in the half-life of hGH-CTP as we moved from rats to primates, in line with industry-accepted extrapolation models for the expected increase in the half-life of therapeutic proteins between these species. Based on the results of this pilot study, we anticipate that hGH-CTP could potentially achieve weekly or bi-monthly dosing frequency in humans.”

Dr. Havron added, “We look forward to completing these toxicology studies and finalizing the IND for hGH-CTP in the coming months. We are pleased too that our current cash resources should enable us to complete the hGH-CTP Phase I clinical program and continue into Phase II trials over the next 24 months.”

ABOUT hGH-CTP (MOD-4023)

hGH-CTP, also known as MOD-4023, is Modigene’s proprietary long-acting version of human growth hormone. hGH is used for the long-term treatment of children and adults with growth failure due to inadequate secretion of endogenous growth hormone. Patients using hGH must currently inject the drug between two and seven times each week, a frequency that can be particularly burdensome for pediatric patients. In contrast, hGH-CTP is expected to require only weekly or bi-monthly injections. The primary indications for hGH in children are growth hormone deficiency, kidney disease, Prader-Willi Syndrome and Turner Syndrome. In adults, the primary indications are replacement of endogenous growth hormone and the treatment of AIDS-induced weight loss. In 2007 the annual market for

hGH was estimated at \$2.5 billion. In addition to its use for medical indications, hGH has been shown to promote a number of “lifestyle” benefits including reversal of non-voluntary weight loss, increased energy levels, enhanced sexual performance, lower cholesterol and improved appearance of the skin.

ABOUT CTP

Modigene’s CTP technology was discovered by researchers at Washington University in St. Louis and is based on a short amino acid sequence that occurs naturally in humans, the carboxyl terminal peptide (CTP). When attached to a therapeutic protein, CTP extends the time that the protein is active in the body. The potential utility of the technology has been demonstrated by Schering-Plough, which licenses the CTP technology for fertility applications only. In July 2008 Schering-Plough announced successful data from its Phase III ENGAGE trial demonstrating that women receiving a single injection of the fertility drug FSH-CTP achieved the same pregnancy rates as women receiving seven consecutive daily injections of commercial FSH. This 1,509 patient trial, which was the largest double-blind fertility trial ever conducted, formed the basis for a Marketing Authorization Application by Schering-Plough that was recently accepted for review by the European Medicines Agency. Modigene is using the same CTP technology to extend the duration of action of human growth hormone and other therapeutic proteins. It has an exclusive license from Washington University to the CTP technology for use with all therapeutic proteins except for the four endocrine hormones licensed to Schering-Plough.

ABOUT MODIGENE

Modigene Inc. is a biopharmaceutical company applying its patented CTP technology to develop longer-acting, proprietary versions of already approved therapeutic proteins that currently generate billions of dollars in annual global sales. The CTP technology is applicable to virtually all proteins, and Modigene is currently developing long-acting versions of human growth hormone, interferon beta and erythropoietin, which are in late preclinical development, as well as GLP-1. For more information on Modigene, visit www.modigeneinc.com.

Safe Harbor Statement: This press release contains forward-looking statements, including statements regarding the results of current studies and preclinical experiments and the effectiveness of Modigene’s long-acting protein programs, that are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that forward-looking statements involve risks and uncertainties that may affect Modigene’s business and prospects, including the risks that Modigene may not succeed in developing any commercial products based upon its long-acting protein technology, including any long-acting versions of human growth hormone, erythropoietin, interferon beta or GLP-1; that the long-acting products in development may fail, may not achieve the expected results or effectiveness and/or may not generate data that would support the approval or marketing of these products for the indications being studied or for other indications; that ongoing studies may not continue to show substantial or any activity; and other risks and uncertainties that may cause results to differ materially from those set forth in the forward-looking statements. The development of any products using the CTP platform technology could also be affected by a number of other factors, including unexpected safety, efficacy or manufacturing issues, additional time requirements for data analyses and decision making, the impact of pharmaceutical industry regulation, the impact of competitive products and pricing and the impact of patents and other proprietary rights held by competitors and other third parties. In addition to the risk factors set forth above, investors should consider the economic, competitive, governmental, technological and other factors discussed in Modigene’s filings with the Securities and Exchange Commission.

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