



## **PROLOR BIOTECH REPORTS NEW PRECLINICAL DATA SUPPORTING THE ENHANCED BIOLOGICAL ACTIVITY POTENTIAL OF ITS BIOBETTER PIPELINE**

**Nes-Ziona, Israel– May 3, 2010** – PROLOR Biotech, Inc. (NYSE Amex: PBTH), a company developing next generation biobetter therapeutic proteins, today reported new preclinical data on the company's pipeline of drug candidates designed to reduce the dosing frequency of therapeutic proteins and peptides. The data will be discussed by PROLOR's management at the 2010 BIO International Convention in Chicago, as well as at the upcoming Rodman & Renshaw 6<sup>th</sup> Annual Global Healthcare Conference in London and the Jefferies 2010 Global Life Sciences Conference in New York City.

The data includes an update on PROLOR's preclinical development program for its CTP-enhanced version of interferon beta (IFN-Beta), a widely used drug for the treatment of multiple sclerosis (MS). In January 2010, the company reported positive results from a study in primates comparing intravenous injections of commercial IFN-Beta with PROLOR's CTP-enhanced version of IFN-Beta. PROLOR's new data includes the results of experiments comparing IFN-Beta-CTP with commercially available IFN-Beta administered by subcutaneous injection.

The preclinical data shows that the AUC (overall drug exposure) of PROLOR's CTP-modified IFN-Beta administered subcutaneously was more than 200 times greater than an equivalent dose of commercial IFN-Beta, expanding on the results in the January study, which showed that CTP-modified IFN-Beta administered intravenously had 55 times greater overall drug exposure compared to commercial IFN-Beta. In both studies, CTP-modified IFN-Beta also demonstrated strong biological potency as measured by several well-validated biomarkers. The results further validate the potential of IFN-Beta-CTP to significantly reduce the current dose level and dosing frequency of interferon beta for the treatment of MS, potentially also reducing the associated side effects.

PROLOR is also presenting preclinical data on its programs for CTP-enhanced Factor VII and Factor IX, potential drugs for the treatment of blood clotting disorders. In these studies, the durability of the CTP-enhanced compounds was increased approximately three to six-fold compared to commercially available Factor VII and Factor IX. —In addition, the company is presenting initial data on its novel anti-obesity peptide, showing that the durability of its biobetter version is 100 times greater than the durability of the naturally-occurring anti-obesity peptide.

"These promising new data from four different PROLOR drug development programs add to our confidence that our technology has the potential to significantly increase the duration of effect and reduce the dosing frequency for a wide variety of therapeutic proteins," said Abraham Havron, Ph.D., CEO of PROLOR. "These positive new preclinical data support our plans to advance our anti-obesity candidate and our Factor VII and Factor IX biobetter compounds into clinical trials during 2011, in addition to our planned initiation of Phase II trials with our proprietary biobetter version of human growth hormone, scheduled for this year."

Dr. Havron added, “We intend to seek a partner for the development of our CTP-enhanced biobetter version of IFN-Beta, and, with the successful completion of studies in our primate subcutaneous injection model, we believe that we now have sufficient data to pursue discussions with potential partners who have an interest in co-developing this promising drug candidate.”

#### **ABOUT CTP TECHNOLOGY**

PROLOR’s CTP technology, which was discovered by researchers at Washington University in St. Louis, 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, reducing the required frequency of administration. The potential utility of the technology has been demonstrated by Merck, which licenses the CTP technology for fertility applications only. Early this year, Merck received European Commission authorization to market its fertility drug ELONVA, a CTP-enhanced version of recombinant follicle stimulating hormone (FSH). A single injection of the recommended dose of ELONVA is indicated to replace the first seven injections of daily FSH for ovarian stimulation in infertility patients. PROLOR is using the same CTP technology to extend the duration of action of human growth hormone, interferon beta and other therapeutic proteins. It has an exclusive license from Washington University to the CTP technology for use with all therapeutic proteins and peptides except for the four endocrine hormones licensed to Merck

#### **ABOUT PROLOR BIOTECH**

PROLOR Biotech, Inc. is a biopharmaceutical company applying unique technologies, including its patented CTP technology, primarily to develop longer-acting, biobetter, 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 PROLOR is currently developing long-acting versions of human growth hormone, which is in clinical development, and interferon beta, factor VII, factor IX and erythropoietin, which are in preclinical development, as well as GLP-1 and other therapeutic peptides. For more information on PROLOR, visit [www.prolor-biotech.com](http://www.prolor-biotech.com).

**Safe Harbor Statement:** *This press release contains forward-looking statements, which may be identified by words such as “expects,” “plans,” “projects,” “will,” “may,” “anticipates,” “believes,” “should,” “would,” “intends,” “estimates,” “suggests” and other words of similar meaning, including statements regarding the results of current clinical studies and preclinical experiments and the effectiveness of PROLOR’s long-acting protein programs, which 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 PROLOR’s business and prospects, including the risks that PROLOR may not succeed in generating any revenues or developing any commercial products, including any long-acting versions of human growth hormone, erythropoietin, interferon beta, GLP-1, and other products; 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; that the actual dollar amount of any grants from Israel’s Office of the Chief Scientist is uncertain and is subject to policy changes of the Israeli government, and that such grants may be insufficient to assist with product development; and other risks and uncertainties that may cause results to differ materially from those set forth in the forward-looking statements. The results of clinical trials in humans may produce results that differ significantly from the results of clinical and other trials in animals. The results of early-stage trials may differ significantly from the results of more developed, later-stage trials. 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 described above, investors should consider the economic, competitive, governmental, technological and other factors discussed in PROLOR's filings with the Securities and Exchange Commission. The forward-looking statements contained in this pres release speak only as of the date the statements were made, and we do not undertake any obligation to update forward-looking statements, except as required under applicable law.*

PROLOR CONTACT:

Shai Novik, President  
PROLOR Biotech, Inc.  
Tel: +1 866 644-7811

Email: [shai@prolor-biotech.com](mailto:shai@prolor-biotech.com)

MEDIA CONTACT:

Barbara Lindheim  
GendeLLindheim BioCom Partners  
+1 212 918-4650