

## **Pro-Pharmaceuticals to Sponsor American Chemical Society's Special Symposium on Galectins**

### **Proposed Mechanism of Action for the Company's Lead Compound DAVANAT®: Binds to Galectin Receptors on Cancer Cells**

**Newton, Mass. (June 14, 2007) Pro-Pharmaceuticals, Inc. (Amex: PRW)**, a Company "Advancing Drugs Through Glycoscience®", today announced it has organized and is sponsoring "A Special Symposium on Galectins: Structures, Functions and Therapeutic Targets," as part of the American Chemical Society's (ACS) 234<sup>th</sup> Annual Meeting, to be held in Boston, August 19-23, 2007. Chairing the two-day Symposium are the Company's Chief Executive Officer, David Platt, Ph.D.; Chief Scientist, Anatole Klyosov, Ph.D., D.Sc, and Zbigniew J. Witczak, Ph.D., member of the Company's Scientific Advisory Board and former chair of the ACS' Division of Carbohydrate Chemistry.

"This Symposium will feature many of the world's distinguished scientists in the field of Galectins," said Dr. Klyosov. "The Symposium will examine recent breakthroughs in this emerging field and will look to the future through an in-depth analysis of the applications and roles that Galectins may play in the treatment of serious diseases, including cancer."

#### **About DAVANAT®**

The proposed mechanism of action for the Company's lead product candidate, DAVANAT®, is based upon binding to lectins on the surface of cancer cells. It is theorized that DAVANAT® targets specific lectin receptors (Galectins) that are over-expressed on cancer cells. Current research indicates that Galectins affect cell development and play important roles in cancer, including tumor cell survival, angiogenesis and tumor metastasis. This form of targeted delivery may allow for higher doses of chemotherapy administration with no increase in toxicity. DAVANAT® is currently in Phase II colorectal and biliary cancer trials with chemotherapy agents such as 5-FU, AVASTIN® and leucovorin.

#### **About Galectins**

Galectins share similar amino acid sequences and are a family of lectins that have affinity for beta glycosides. Galectins bind to a wide array of glycoproteins and glycolipids, both on the cell surface and in extracellular matrices. By binding to these glycoconjugates, Galectins deliver signals intracellularly as well as mediate cell-cell and cell-extracellular matrix adhesion. The most extensive studied function of Galectins is the regulation of apoptosis: some Galectins can induce apoptosis when added exogenously to cells, whereas others regulate apoptosis through intracellular mechanisms. Galectin-1 and Galectin-3 can interact with oncogenic Ras and mediate cell transformation induced by this oncogene. Galectins can modulate cell adhesion and cell migration, thereby affecting the process of tumor metastasis. Galectins have pro-and anti-inflammatory functions and modulate the immune response. Galectin-1 functions as a soluble mediator employed by tumor cells to evade the immune response. Galectins are often over expressed in cancerous cells and cancer associated stromal cells, especially in cell types that do not normally express specific Galectins. In many situations, this altered Galectin expression correlates with the aggressiveness of the tumor and the acquisition of the metastatic phenotype indicates that Galectins might modulate tumor progression and influence disease outcome.

## **Pro-Pharmaceuticals, Inc. – Advancing Drugs Through Glycoscience®**

Pro-Pharmaceuticals, Inc. is engaged in the discovery, development, and commercialization of therapeutic compounds for advanced treatment of cancer, liver, microbial, cardiovascular, and inflammatory diseases. The Company's initial focus is the development of a new generation of anti-cancer treatments using polymers with the intent of enhancing the safety and efficacy of chemotherapy agents. The Company's technology also is directed at "rescuing" drugs that were shelved for toxicity or "half-life" issues; increasing the solubility of existing drugs, and developing polymers as new chemical entities. Founded in 2000, the Company is headquartered in Newton, Mass. Additional information is available at [www.pro-pharmaceuticals.com](http://www.pro-pharmaceuticals.com).

**FORWARD LOOKING STATEMENTS:** Any statements in this news release about future expectations, plans and prospects for the Company, including without limitation statements containing the words "believes," "anticipates," "plans," "expects," and similar expressions, constitute forward-looking statements as defined in the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on management's current expectations and are subject to a number of factors and uncertainties, which could cause actual results to differ materially from those described in such statements. Actual results or business conditions may differ materially from those projected or suggested in forward-looking statements. More information about those risks and uncertainties is contained in the Company's most recent quarterly or annual report and in the Company's other reports filed with the Securities and Exchange Commission. While the Company anticipates that subsequent events may cause the Company's views to change, the Company disclaims any obligation to update such forward-looking statements.

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