

## **PRO-PHARMACEUTICALS' CHIEF SCIENTIST PUBLISHED ARTICLES IN THREE PRESTIGIOUS PEER-REVIEWED JOURNALS**

### **NMR Studies Further Define DAVANAT®'s Mechanism of Action with Galectin Receptors Found on Solid Tumors**

**Newton, MA – June 24, 2009 – Pro-Pharmaceuticals, Inc. (OTC: PRWP)**, a developer of carbohydrate-based targeted therapeutic compounds to treat cancer and fibrosis, today announced that its Chief Scientist and co-founder, Anatole Klyosov, Ph.D., published articles in: *the Biochemical Journal*, *Carbohydrate Research* and *Glycobiology* that further define the mechanism of action of its lead compound DAVANAT® and the role it plays in the treatment of cancer.

“The nuclear magnetic resonance (NMR) studies demonstrate a strong interaction between DAVANAT® and the Galectin receptors found on the surface of solid tumors,” said Dr. Klyosov. “Understanding the interaction between carbohydrate drugs such as DAVANAT® and Galectins can lead to effective, non-toxic treatment of inflammatory diseases, such as cancer, fibrosis and arthritis. These three pathologies, while very different at first glance, all turned out to be Galectin-dependent diseases.”

Dr. Klyosov and David Platt, Ph.D., a co-founder and former CEO of Pro-Pharmaceuticals, also published two books, “Carbohydrate Drug Design” (Oxford University Press, 2006) and “Galectins” (John Wiley & Sons, 2008) and chaired two ACS (American Chemical Society) symposia on the same subjects. The symposia and the books offer a comprehensive understanding of carbohydrates as drugs and the role Galectins play in tumor growth, cancer, angiogenesis, resistance to chemotherapy, and the initiation and proliferation of organ fibrosis.

Pro-Pharmaceuticals (“The Company”) is in the process of designing a Phase III study for the treatment of late stage colorectal cancer patients. The Company is also actively pursuing agreements with international partners as well as with several large pharmaceutical companies.

#### **About DAVANAT®**

DAVANAT®, Pro-Pharmaceuticals' lead product candidate, is a carbohydrate polymer composed of mannose and galactose. DAVANAT®'s mechanism of action is based on interacting with lectins on the cell surface. 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.

#### **Pro-Pharmaceuticals, Inc.**

Pro-Pharmaceuticals, OTCBB: PRWP, is engaged in the discovery, development and commercialization of carbohydrate therapeutics for advanced treatment of cancer and fibrosis. Initially, the product pipeline is focused on increasing the efficacy and decreasing the toxicity of chemotherapy drugs. 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. We caution investors that actual results or business conditions may differ materially from those projected or suggested in forward-looking statements as a result of various factors. Readers should not place undue reliance on forward-looking statements.

More information about those risks and uncertainties is contained and discussed in the "Management Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors" sections of the Company's most recent quarterly or annual report and in the Company's other reports filed with the Securities and Exchange Commission. The forward-looking statements represent the Company's views as of the date of this news release and should not be relied upon to represent the Company's views as of a subsequent date. 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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DAVANAT is a registered trademark of Pro-Pharmaceuticals.