

\$3 Million Award to Develop Cancer Pain Drug

Advanced Targeting Systems, the company that pioneered the targeting of specific cell types to manipulate them for the treatment of diseases and for research into the function of biological systems, has been awarded \$3 million from the National Cancer Institute (NCI). Representatives from the NCI stated that the Advanced Targeting Systems proposal was ranked #1 for funding out of a nationwide program with hundreds of applicants. Advanced Targeting Systems will use the funds to advance its patented drug, SP-SAP, over the next two years to initiate clinical trials for cancer pain.

SP-SAP is a conjugate between the pain-processing peptide Substance P and the ribosome-inactivating protein saporin. The first publications of SP-SAP in the journal *Science* demonstrated a new direction for the understanding and treatment of pain pathology such as that which accompanies cancer. These have been followed by numerous publications from top-level scientists around the world delineating the activity of SP-SAP. The mechanism of action of SP-SAP is well characterized, a rarity in pain therapeutics: a small number of cells that process pathological pain signals are removed causing relief that appears to be permanent. Normal acute pain is unaffected.

The Food and Drug Administration has recommended that the first population to undergo treatment with SP-SAP is terminal cancer patients who are resistant to opioids such as morphine. Pain due to cancer is a great fear, at times greater than even the fear of death, in the progression of the disease. To make matters worse, many times this pain is unresponsive to the last stand treatment: opioids. There is also a common

fear among terminal patients that current pain treatments will leave them unable to function normally at a time when it is personally extremely important for them. In preclinical tests, a single treatment with SP-SAP alleviated pathologic pain perception without affecting other sensory signal pathways.

Advanced Targeting Systems has assembled a team of experts to carry out the goals of the BRDG-SPAN project. Foremost among these are: Dr. Art Frankel from the Scott & White Cancer Research Center, Dr. Allen Burton from the MD Anderson Cancer Center, and Dr. Dorothy Brown of the University of Pennsylvania. All regulatory aspects of the project will be spear-headed by the professional team at Cato Research.

"I am gratified that the National Cancer Institute and the peer reviewers recognize the strength and quality of a 'Dream Team' of physicians, researchers and regulatory specialists that we have put together for this project," stated Dr. Douglas Lappi, Principal Investigator and President/Chief Scientific Officer of Advanced Targeting Systems.

About The BRDG-SPAN Program

The National Institutes of Health BRDG-SPAN Pilot Program (the Biomedical Research, Development, and Growth to Spur the Acceleration of New Technologies Pilot Program (RC3) is supported by funds provided to the NIH under the American Recovery & Reinvestment Act of 2009, a component of the Federal Stimulus Package. The purpose of this pilot program is to accelerate the transition of research innovations and technologies toward the development of products or services that will improve *(continued on page 6)*

American Association
for Cancer Research
April 2-6, 2011
Orlando, FL



Society for Neuroscience
Nov 14-17, 2010
Booth #3525
San Diego, CA

Upcoming Events

Targeting Teaser Winners

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Answer: They had . . . GREAT CHEMISTRY



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