



PRESS RELEASE
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**CALANDO PHARMACEUTICALS PUBLISHES STUDY SHOWING ANTI-CANCER EFFECT
WITH LEAD RNAi CANDIDATE**

PASADENA, Calif.—April 3, 2007—Calando Pharmaceuticals, a leading siRNA therapeutics company and a majority-owned subsidiary of Arrowhead Research Corporation (NASDAQ: ARWR) announced the publication of a study demonstrating the anti-proliferative effect of the siRNA sequence selected as the therapeutic component of its lead anti-cancer compound, CALAA-01.

The paper, entitled “Potent siRNA Inhibitors of Ribonucleotide Reductase Subunit RRM2 Reduce Cell Proliferation *In vitro* and *In vivo*”, was published in the April 1 edition of *Clinical Cancer Research*, a journal published by the American Association of Cancer Research (AACR). This paper describes how Calando researchers and their collaborators determined the sequence of siRNA included in Calando’s lead siRNA-containing nanoparticle formulation (CALAA-01). Numerous putative candidate siRNA duplexes targeting the M2 subunit of ribonucleotide reductase (RRM2) were screened, and those with maximal anti-RRM2 activity were further tested. The best candidate siRNA duplex demonstrated potent reduction of RRM2 protein levels in cultured cells and achieved a concomitant anti-proliferative effect in cells of multiple species (including human, mouse, rat, and monkey) and cancer types, both *in vitro* and *in vivo*. These findings confirm that this duplex is a promising candidate for therapeutic development.

“This paper highlights the results from screening experiments in which the sequence of Calando’s lead anti-RRM2 siRNA was determined,” said Jeremy Heidel, Calando’s Chief Scientific Officer. “This duplex is powerful in its ability to down-regulate its target and elicits a strong anti-proliferative effect in a variety of types of cancer cells.”

“These studies demonstrate the potential for this siRNA duplex to have a strong anti-tumor effect,” said John Petrovich, Calando’s Chief Executive Officer. Petrovich also noted that Calando has filed for patent protection on several siRNA duplexes against RRM2 in a patent application that was published in November 2006 (US Patent Application No. 20060263435) and has licensed patents from Alnylam Pharmaceuticals to enable it to develop and commercialize an RNAi therapeutic against this target,

Clinical Cancer Research publishes original articles describing clinical research on the cellular and molecular characterization, prevention, diagnosis, and therapy of human cancer. Its focus is on innovative clinical research and translational research which bridges the laboratory and the clinic. *Clinical Cancer Research* is especially interested in clinical trials evaluating new treatments for cancer; research on molecular abnormalities that predict incidence, response to therapy, and outcome, and laboratory studies of new drugs and biological agents that will lead to clinical trials in patients.

About RNA Interference (RNAi)

RNA interference, or RNAi, is a naturally occurring mechanism within cells for selectively silencing and regulating specific genes. Since many diseases are caused by the inappropriate activity of specific genes, the ability to silence genes selectively through RNAi could provide a new way to treat a wide range of human diseases. RNAi is induced by small, double-stranded RNA molecules. One method to activate RNAi is with chemically synthesized small interfering RNAs, or siRNAs, which are double-stranded RNAs that are targeted to a specific disease-associated gene. The siRNA molecules are used by the natural RNAi machinery in cells to cause highly targeted gene silencing.

About Calando Pharmaceuticals Inc.

Calando Pharmaceuticals Inc. (www.calandopharma.com), a majority owned subsidiary of Arrowhead Research Corporation (NASDAQ: ARWR), is using its proprietary technologies in targeted polymeric delivery systems and siRNA design to design and create new, targeted siRNA therapeutics. The company is pursuing this goal through its internal research and development and also through collaborations and partnerships with pharmaceutical and biotechnology companies.

Calando Technology

Calando's cyclodextrin-containing polymers form the foundation for its two-part siRNA delivery system. The first component is a linear, cyclodextrin-containing polycation that, when mixed with small interfering RNA (siRNA), binds to the anionic "backbone" of the siRNA. The polymer and siRNA self-assemble into nanoparticles of approximately 50-80 nm diameter that fully protect the siRNA from nuclease degradation in serum. The siRNA delivery system has been designed to allow for intravenous injection. Upon delivery to the target cell, the targeting ligand binds to membrane receptors on the cell surface and the RNA-containing nanoparticle is taken into the cell by endocytosis. There, chemistry built into the polymer functions to unpackage the siRNA from the delivery vehicle. In addition to targeting tumors, the targeting of liver cells has also been accomplished *in vivo*.

About Arrowhead Research Corporation

Arrowhead Research Corporation (www.arrowheadresearch.com) is a publicly-traded nanotechnology company commercializing new technologies in the areas of life sciences, electronics, and energy. Arrowhead is building value for shareholders through the progress of majority owned subsidiaries founded on nanotechnologies originally developed at universities. The company works closely with universities to source early stage deals and to generate rights to intellectual property covering promising new nanotechnologies. Currently, Arrowhead has four subsidiaries commercializing nanotech products and applications, including anti-cancer drugs, RNAi therapeutics, carbon-based electronics and compound semiconductor materials.

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995:

This news release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements are based upon our current expectations and speak only as of the date hereof. Our actual results may differ materially and adversely from those expressed in any forward-looking statements as a result of various factors and uncertainties, including the recent economic slowdown affecting technology companies, the future success of our scientific studies, our ability to successfully develop products, rapid technological change in our markets, changes in demand for our future products, legislative, regulatory and competitive developments and general economic conditions. Our Annual Report on Form 10-K and 10-K/A, recent and forthcoming Quarterly Reports on Form 10-Q and 10-Q/A, recent Current Reports on Forms 8-K and 8-K/A, our Registration Statements on Form S-3, and other SEC filings discuss some of the important risk factors that may affect our business, results of operations and financial condition. We undertake no obligation to revise or update publicly any forward-looking statements for any reason.

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