



July 11, 2012

Arrowhead Announces Dosing of First Patient with Anti-Obesity Treatment Adipotide® in a Phase 1 Clinical Trial

PASADENA, Calif. — July 11, 2012 — Arrowhead Research Corporation (NASDAQ: ARWR), a targeted therapeutics company, today announced that the first patient has been dosed in a Phase 1 clinical trial with Adipotide®, a new class of treatment for obesity. Adipotide, formerly known as Prohibitin-TP01, is a synthetic peptide that targets a protein on the surface of blood vessels supporting white adipose tissue (fat), disrupting the blood supply to fat cells and causing them to be reabsorbed and metabolized. Treatment has led to substantial weight loss, decreased food intake, and rapid metabolic changes in multiple experimental animal models, suggesting potential usefulness as a treatment for Type II diabetes.

The Phase 1 trial is designed to evaluate a single 28 day cycle of Adipotide in patients with castrate-resistant prostate cancer and no standard treatment options. The study is intended to identify a maximum tolerated dose, assess pharmacokinetics, measure the change in weight, and monitor disease progression, in addition to other secondary outcome measures. Fat tissue is known to produce substances that can promote prostate cancer growth. Investigators at the MD Anderson Cancer Center, who are conducting and bearing the costs of the clinical trial, also seek to learn if decreasing white fat, the type of fat associated with obesity, can slow the growth of prostate cancer.

Patients will receive Adipotide as an injection under the skin once daily for 28 days. Up to five dose levels will be tested with three participants enrolled at each dose level. The first group will receive the lowest dose and each new group will receive a higher dose level than the group before it, based on an evaluation of observed safety. This will continue until the highest dose of Adipotide with acceptable safety is found or all five dosing cohorts have been completed.

"We are delighted to announce that patient dosing has begun in the Phase 1 trial of Adipotide," said Dr. Chris Anzalone, President and Chief Executive Officer of Arrowhead. "Obesity and its related co-morbidities represent a serious public health issue in the United States and other parts of the world. We believe Adipotide is a promising pharmacological option to combat it. Through our unique approach of acting directly on the vasculature of fat rather than the brain, we hope to avoid the many safety concerns that have hindered other anti-obesity drug candidates. Moreover, the preclinical efficacy we have seen is striking and we are eager to see results from this first-in-man study."

Multiple independent studies with Adipotide have demonstrated that obese rodents lose up to 30% of their body weight after only 28 days of treatment while lean animals show no weight loss. Studies have also shown that obese animals undergo rapid improvement in pro-diabetic metabolic markers, including significantly improved insulin sensitivity, improved glucose tolerance, and a reduction in serum triglycerides after only 2-3 days of treatment. Adipotide has been further studied in non-human primates, and it has been reported that after 28 days of treatment obese rhesus monkeys lost an average of 11% of their body weight, experienced a reduction in body mass index and abdominal circumference, and showed marked improvements in insulin resistance, a marker for type II diabetes. These data were published in the peer-reviewed journal *Science Translational Medicine* in November 2011 (*Sci Trans Med* 3, 108-112 (2011) DOI: 10.1126/scitranslmed.3002621).

About Arrowhead Research Corporation

Arrowhead Research Corporation is a clinical stage targeted therapeutics company with development programs in oncology, obesity, and infectious disease. The company leverages its platform technologies to design and develop peptide-drug conjugates (PDCs) which specifically home to cell types of interest while sparing off-target tissues, creates targeted drugs based on the gene silencing RNA interference (RNAi) mechanism, and works with partners to create improved versions of traditional small molecule drugs.

For more information please visit <http://www.arrowheadresearch.com>, or follow us on Twitter [@ArrowRes](https://twitter.com/ArrowRes). To be added to the Company's email list to receive news directly, please send an email to ir@arrowres.com

Safe Harbor Statement under the Private Securities Litigation Reform Act:

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 our ability to finance our operations, the future success of our scientific studies, our ability to successfully develop drug candidates, the timing for starting and completing clinical trials, rapid technological change in our markets, and the enforcement of our intellectual property rights. Arrowhead Research Corporation's most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q discuss some of the important risk factors that may affect our business, results of operations and financial condition. We assume no obligation to update or revise forward-looking statements to reflect new events or circumstances.

Contacts:

Michael Levitan
The Trout Group, LLC
646-378-2920
ir@arrowres.com