UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): December 22, 2010

Arrowhead Research Corporation

(Exact name of registrant as specified in its charter)

0-21898 (Commission File Number)

Delaware (State or other jurisdiction of incorporation)

46-0408024 (IRS Employer Identification No.)

201 South Lake Avenue, Suite 703, Pasadena, CA 91101 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code (626) 304-3400

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4 (c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition

On December 22, 2010, Arrowhead Research Corporation announced and commented on its fourth quarter and year-end financial results for the period ended September 30, 2010. A copy of the press release is furnished herewith as Exhibit 99.1 and incorporated by reference herein.

In accordance with General Instruction B.2 of Form 8-K, the information in this Current Report on Form 8-K, including Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, except as expressly set forth by specific reference in such filing to this Current Report on Form 8-K.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No. Description

99.1 Press Release, dated December 22, 2010.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: December 22, 2010

ARROWHEAD RESEARCH CORPORATION

By: /s/ Kenneth A. Myszkowski

Kenneth A. Myszkowski Chief Financial Officer



PRESS RELEASE December 22, 2010 Investor Relations Contact:

Brandi Floberg
The Piacente Group, Inc.
212-481-2050
ir@arrowres.com

ARROWHEAD REPORTS FISCAL 2010 FOURTH QUARTER AND YEAR-END FINANCIAL RESULTS

PASADENA, Calif. – December 22, 2010 – Arrowhead Research Corporation (NASDAQ: ARWR) today announced financial results for its fiscal 2010 fourth quarter and year ended September 30, 2010.

"Fiscal 2010 was a pivotal year for Arrowhead based on key technology and corporate advancements that reinforce the strength of our business model," said Dr. Christopher Anzalone, Arrowhead's CEO. "Having accomplished the vast majority of our key goals outlined for shareholders earlier this year, we are increasing our ability to operate as a focused nanomedicine company with a strong technology base that address large market opportunities. Some of our most recent achievements include attaining financial independence for Unidym, establishing a new anti-obesity subsidiary to augment our portfolio, entering into the first corporate partnership for Nanotope, and strengthening our team by appointing additional renowned industry leaders to our Board of Directors and Scientific Advisory Board.

"With preliminary data that demonstrates the first successful systemic delivery of siRNA and gene silencing via RNAi in humans, Calando represents an exceptional opportunity for the RNAi industry and for our company. We had hoped to execute an initial partnership for Calando by year's end but the landscape for RNAi partnerships has shifted. We are still seeing a large appetite for RNAi and an appreciation for Calando's lead in addressing the great limiting factor of therapeutic RNAi: effective systemic delivery. However, the bar for large deals has changed and more extensive clinical data is now critical. While this has extended our expected timing, we believe that it may actually work to our benefit in the mid- and long-term. Because of our advanced position in the clinic and potential partners' greater reliance on clinical data, we believe the universe of our competition for large siRNA delivery deals has decreased

substantially. In addition, we remain confident that the value of Calando and the deals it may enter into increase with every patient treated. We continue to be focused on completing Calando's Phase I clinical trial and establishing a large pharma partnership. In line with our model, we are simultaneously advancing our other subsidiaries in our growing nanomedicine portfolio."

FISCAL 2010 FOURTH QUARTER AND RECENT COMPANY HIGHLIGHTS

• Business highlights:

- o Calando continued to enroll patients in its Phase I cancer trial and build relationships with potential partners and acquirers.
- o Arrowhead consolidated its ownership interest in Calando and simplified Calando's capital structure through investment, conversion of debt, and acquisition of minority interest.
- o Unidym entered into IP cooperation and licensing agreements with Samsung Electronics generating revenue of \$4.5 million in December 2010, alleviating Arrowhead of funding obligations for Unidym operations.
- o Nanotope entered into its first development partnership with Smith & Nephew, a global leader in medical technology, for up to \$26.55 million in milestone payments plus potential sales royalties.
- o Arrowhead formed a new subsidiary, Ablaris Therapeutics, Inc., to commercialize obesity fighting therapeutics.
- o Drs. Mauro Ferrari and Doug Given joined Arrowhead's Board of Directors, deepening Arrowhead's scientific and business expertise.

• Financial highlights:

- o Full year operating expenses decreased by 60% from \$23.3 million in fiscal 2009 to \$9.4 million in fiscal 2010.
- o Cash used in operating activities decreased from \$15.1 million in fiscal 2009 to \$7.7 million in fiscal 2010.

SELECTED FISCAL 2010 FOURTH QUARTER FINANCIAL RESULTS

For the quarter ended September 30, 2010, Arrowhead's revenue was \$181,000, compared with \$187,000 in the quarter ended September 30, 2009. Total operating expenses for the quarter ended September 30, 2010 were \$2.5 million, a decrease of \$1.2 million from \$3.7 million during the quarter ended September 30, 2009.

Net loss attributable to Arrowhead for the quarter ended September 30, 2010 was \$2.0 million, or \$0.03 per share based on 71.1 million weighted average shares outstanding. This compares with a net loss attributable to Arrowhead of \$3.5 million, or \$0.06 per share based on 51.5 million weighted average shares outstanding, for the quarter ended September 30, 2009.

SELECTED FISCAL 2010 FULL YEAR FINANCIAL RESULTS

For the fiscal year ended September 30, 2010, Arrowhead reported revenues of \$620,000, compared with \$3.8 million for the fiscal year ended September 30, 2009. Net loss attributable to Arrowhead for the 2010 fiscal year was \$5.8 million, or \$0.09 per share based on 64.3 million weighted average shares outstanding, compared with a net loss attributable to Arrowhead of \$19.3 million, or \$0.43 per share based on 45.2 million weighted average shares outstanding in fiscal 2009.

The Company's net cash used in operations for fiscal 2010 was \$7.7 million, compared with \$15.1 million in fiscal 2009. Cash provided by financing activities was \$12.0 million, primarily due to proceeds from the issuances of equity and warrants of \$12.8 million offset by payments on capital lease obligation of \$0.7 million. As of September 30, 2010, Arrowhead had cash and cash equivalents of \$6.8 million and stockholders' equity of \$8.1 million.

CONFERENCE CALL

Management will host a conference call today, Wednesday, December 22, 2010 at 4:30 p.m. Eastern time (1:30 p.m. Pacific time). To participate in the conference call, please dial 877-407-4134 (toll free from the US and Canada), or 201-689-8430 (for international callers). Investors may also access a live audio webcast of this conference call on the Company's website at www.arrowheadresearch.com.

A replay of the webcast will be available approximately two hours after the conclusion of the call. The webcast archive will remain available for 90 days. An audio replay will also be available approximately two hours after the conclusion of the call and will be made available until Wednesday, December 29, 2010. The audio replay can be accessed by dialing 877-660-6853 (toll free from the US and Canada), or 201-612-7415 (for international callers) and entering account number 356 and passcode 363073.

ABOUT ARROWHEAD RESEARCH CORPORATION

Arrowhead Research Corporation (www.arrowheadresearch.com) (NASDAQ: ARWR) is a nanotechnology company commercializing new technologies in the areas of life sciences and electronics. Arrowhead is seeking to build value for shareholders through the progress of its subsidiaries and investments. Currently, Arrowhead is focused primarily on its two majority owned subsidiaries; Unidym, a leader in carbon nanotube technology for electronic applications, and Calando, at the forefront of clinical application of RNAi delivery technology. Arrowhead also has minority investments in two privately held nanobiotech companies.

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 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, the financial resources available to us, and general economic conditions. For example, there can be no assurance that Arrowhead or its subsidiaries will be able to sustain operations for expected periods, that we will be able to sustain targeted levels of expense reductions or that any of these entities will be successful in obtaining additional funding needed to sustain operations. Additionally, there can be no assurance that the company will successfully acquire new programs or compounds, as may be currently expected. 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.