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): April 5, 2012

Arrowhead Research Corporation

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

0-21898 (Commission File Number)

46-0408024 (I.R.S. Employer Identification No.)

225 South Lake Avenue, Suite 300, Pasadena, CA (Address of principal executive offices)

91101 (Zip Code)

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

Not Applicable

Former name or former address, if changed since last report 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 3.02. Unregistered Sales of Equity Securities

The disclosure set forth below under Item 8.01 is incorporated herein by reference.

The shares of common stock issued to the Stockholders were issued in a private placement transaction that was exempt from registration under Section 4(2) of the Securities Act of 1933.

Item 8.01. Other Events

On April 5, 2012, Arrowhead Research Corporation (the "Company") entered into a Stock Purchase Agreement (the "Agreement") with Alvos Therapeutics Inc. ("Alvos"), the stockholders of Alvos set forth in the Agreement (the "Stockholders") and a representative of the Stockholders (the "Stockholders Representative"), pursuant to which the Company purchased all of the outstanding shares of Alvos from the Stockholders in exchange for (i) initial consideration of 315,457 shares of the Company's common stock and (ii) potential additional issuances of common stock based on the achievement of clinical development milestones and sales targets for the first three compounds developed. The Agreement includes customary representations and warranties by Alvos and the Stockholders.

Alvos is developing novel peptide drug conjugates (PDCs) designed to hunt and destroy primary and metastatic cancers using human-derived "Homing Peptides" discovered through a technique called "phage display". Alvos' platform technology is licensed from the MD Anderson Cancer Center, and includes exclusive rights to numerous patents and patent applications. The license agreement with MD Anderson Cancer Center includes annual maintenance fees, milestone payments and sales royalties.

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: April 11, 2012 ARROWHEAD RESEARCH CORPORATION

By: /s/ Kenneth Myszkowski

Kenneth Myszkowski Chief Financial Officer