

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549**

**FORM 10-Q**

(Mark One)

**QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended December 31, 2014

**TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number 000-21898

**ARROWHEAD RESEARCH CORPORATION**

(Exact name of registrant as specified in its charter)

Delaware  
(State of incorporation)

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

225 S. Lake Avenue, Suite 1050  
Pasadena, California 91101  
(626) 304-3400

(Address and telephone number of principal executive offices)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The number of shares of the registrant's common stock outstanding as of February 5, 2015 was 54,792,649.

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## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

**Arrowhead Research Corporation**  
**Consolidated Balance Sheets**

	(unaudited)	
	December 31, 2014	September 30, 2014
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$ 103,991,231	\$ 132,510,610
Trade receivables	127,000	-
Prepaid expenses	4,451,124	588,626
Other current assets	62,841	48,502
Short term investments	23,532,402	21,653,032
<b>TOTAL CURRENT ASSETS</b>	<b>132,164,598</b>	<b>154,800,770</b>
Property and equipment, net	4,124,441	3,872,753
Intangible assets, net	999,809	1,013,473
Investments	17,806,499	23,088,346
Other assets	7,041,414	41,414
<b>TOTAL ASSETS</b>	<b>\$ 162,136,761</b>	<b>\$ 182,816,756</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable	\$ 5,994,951	\$ 2,579,478
Accrued expenses	1,148,092	1,399,486
Accrued payroll and benefits	2,175,484	3,268,506
Deferred revenue	109,375	103,125
Derivative liabilities	1,790,559	4,173,943
Capital lease obligation	213,991	213,991
Notes payable	-	50,000
Other current liabilities	65,213	58,495
<b>TOTAL CURRENT LIABILITIES</b>	<b>11,497,665</b>	<b>11,847,024</b>
<b>LONG-TERM LIABILITIES</b>		
Capital lease obligation, net of current portion	705,173	758,340
Contingent consideration obligations	3,970,931	3,970,931
Other non-current liabilities	253,321	255,206
<b>TOTAL LONG-TERM LIABILITIES</b>	<b>4,929,425</b>	<b>4,984,477</b>
Commitments and contingencies		
<b>STOCKHOLDERS' EQUITY</b>		
Arrowhead Research Corporation stockholders' equity:		
Preferred stock, \$0.001 par value; 5,000,000 shares authorized; 18,300 and 18,300 shares issued and outstanding as of December 31, 2014 and September 30, 2014, respectively	18	18
Common stock, \$0.001 par value; 145,000,000 shares authorized; 54,715,714 and 54,656,936 shares issued and outstanding as of December 31, 2014 and September 30, 2014, respectively	147,085	147,026
Additional paid-in capital	393,464,197	391,164,558
Accumulated deficit during the development stage	(247,346,441)	(224,771,159)
<b>Total Arrowhead Research Corporation stockholders' equity</b>	<b>146,264,859</b>	<b>166,540,443</b>
Noncontrolling interest	(555,188)	(555,188)
<b>TOTAL STOCKHOLDERS' EQUITY</b>	<b>145,709,671</b>	<b>165,985,255</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 162,136,761</b>	<b>\$ 182,816,756</b>

*The accompanying notes are an integral part of these unaudited consolidated financial statements.*

**Arrowhead Research Corporation**  
**Consolidated Statements of Operations**  
(unaudited)

	Three Months ended December 31, 2014	Three Months ended December 31, 2013
<b>REVENUE</b>	<b>\$ 170,750</b>	<b>\$ 43,750</b>
<b>OPERATING EXPENSES</b>		
Research and development	17,744,312	3,133,014
Salaries and payroll-related costs	3,150,617	2,081,791
General and administrative expenses	2,086,202	913,784
Stock-based compensation	2,014,856	521,138
Depreciation and amortization	290,039	403,405
<b>TOTAL OPERATING EXPENSES</b>	<b>25,286,026</b>	<b>7,053,132</b>
<b>OPERATING LOSS</b>	<b>(25,115,276)</b>	<b>(7,009,382)</b>
<b>OTHER INCOME (EXPENSE)</b>		
Equity in income (loss) of unconsolidated affiliates	-	(138,456)
Gain (loss) on sale of fixed assets, net	(26,381)	(53,562)
Interest income (expense), net	237,417	40,578
Change in value of derivatives	2,382,142	(3,519,579)
Other income (expense)	(53,184)	(5,331)
<b>TOTAL OTHER INCOME (EXPENSE)</b>	<b>2,539,994</b>	<b>(3,676,350)</b>
<b>LOSS BEFORE INCOME TAXES</b>	<b>(22,575,282)</b>	<b>(10,685,732)</b>
Provision for income taxes	-	-
<b>NET LOSS</b>	<b>(22,575,282)</b>	<b>(10,685,732)</b>
Net loss attributable to noncontrolling interests	-	57,420
<b>NET LOSS ATTRIBUTABLE TO ARROWHEAD</b>	<b>\$ (22,575,282)</b>	<b>\$ (10,628,312)</b>
<b>NET LOSS PER SHARE ATTRIBUTABLE TO ARROWHEAD</b>		
<b>SHAREHOLDERS - BASIC &amp; DILUTED:</b>	<b>\$ (0.41)</b>	<b>\$ (0.28)</b>
Weighted average shares outstanding - basic and diluted	54,692,392	37,741,743

*The accompanying notes are an integral part of these unaudited consolidated financial statements.*

**Arrowhead Research Corporation**  
**Consolidated Statement of Stockholders' Equity**  
(unaudited)

	Preferred Stock		Common Stock		Additional	Accumulated	Non-	Totals
	Shares	Amount (\$)	Shares	Amount (\$)	Paid-in Capital	Deficit	controlling interest	
<b>Balance at September 30, 2013</b>	<b>9,900</b>	<b>\$ 10</b>	<b>32,489,444</b>	<b>\$ 124,859</b>	<b>\$ 193,514,766</b>	<b>\$ (166,140,969)</b>	<b>\$ (1,763,877)</b>	<b>\$ 25,734,789</b>
Exercise of warrants	-	-	2,911,919	2,911	10,145,133	-	-	10,148,044
Exercise of stock options	-	-	454,863	455	2,729,545	-	-	2,730,000
Stock-based compensation	-	-	-	-	5,696,173	-	-	5,696,173
Common stock issued @ \$5.86	-	-	3,071,672	3,072	14,057,040	-	-	14,060,112
Common stock issued @ \$18.95	-	-	6,325,000	6,325	112,575,234	-	-	112,581,559
Preferred stock issued @ \$1,000 per share	46,000	46	-	-	45,999,954	-	-	46,000,000
Common stock issued to Galloway	-	-	131,579	132	499,868	-	-	500,000
Settlements related to derivative liability	-	-	-	-	5,956,079	-	-	5,956,079
Preferred stock converted to common stock	(37,600)	(38)	9,272,459	9,272	(9,234)	-	-	-
Deconsolidation of Calando Pharmaceuticals, Inc.	-	-	-	-	-	-	1,303,911	1,303,911
Net loss for the year ended September 30, 2014	-	-	-	-	-	(58,630,190)	(95,222)	(58,725,412)
<b>Balance at September 30, 2014</b>	<b>18,300</b>	<b>\$ 18</b>	<b>54,656,936</b>	<b>\$ 147,026</b>	<b>\$ 391,164,558</b>	<b>\$ (224,771,159)</b>	<b>\$ (555,188)</b>	<b>\$ 165,985,255</b>
Exercise of warrants	-	-	53,578	53	270,571	-	-	270,624
Exercise of stock options	-	-	2,500	3	12,973	-	-	12,976
Stock-based compensation	-	-	-	-	2,014,856	-	-	2,014,856
Exercise of exchange rights	-	-	2,700	3	1,239	-	-	1,242
Net loss for the three months ended December 31, 2014	-	-	-	-	-	(22,575,282)	-	(22,575,282)
<b>Balance at December 31, 2014</b>	<b>18,300</b>	<b>\$ 18</b>	<b>54,715,714</b>	<b>\$ 147,085</b>	<b>\$ 393,464,197</b>	<b>\$ (247,346,441)</b>	<b>\$ (555,188)</b>	<b>\$ 145,709,671</b>

*The accompanying notes are an integral part of these unaudited consolidated financial statements.*

**Arrowhead Research Corporation**  
**Consolidated Statements of Cash Flows**  
(unaudited)

	Three months ended December 31, 2014	Three months ended December 31, 2013
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss	\$ (22,575,282)	\$ (10,685,732)
Net loss attributable to non-controlling interests	-	57,420
Net loss attributable to Arrowhead	(22,575,282)	(10,628,312)
(Gain) loss on disposal of fixed assets	26,381	53,562
Change in value of derivatives	(2,382,142)	3,519,579
Stock-based compensation	2,014,856	521,138
Depreciation and amortization	290,039	403,405
Amortization/accretion of note premiums/discounts, net	347,703	28,443
Non-controlling interest	-	(57,420)
Changes in operating assets and liabilities:		
Receivables	(127,000)	(11,825)
Other receivables	(9,506)	-
Prepaid expenses	(3,874,051)	(74,455)
Accounts payable	3,415,473	(610,284)
Accrued expenses	(1,325,675)	56,648
Other liabilities	(802)	(222,811)
NET CASH USED IN OPERATING ACTIVITIES	(24,200,006)	(7,022,332)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchases of property and equipment	(554,945)	(116,215)
Proceeds from sale of fixed assets	500	-
Purchase of marketable securities	-	(19,075,306)
Proceeds from sale of marketable securities	3,054,774	4,045,956
Other investing activities	(7,000,000)	-
NET CASH USED IN INVESTING ACTIVITIES	(4,499,671)	(15,145,565)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Principal payments on capital leases and notes payable	(103,168)	(54,715)
Proceeds from issuance of common stock and preferred stock, net	-	62,821,592
Proceeds from the exercise of warrants and stock options	283,466	-
NET CASH PROVIDED BY FINANCING ACTIVITIES	180,298	62,766,877
NET INCREASE (DECREASE) IN CASH	(28,519,379)	40,598,980
CASH AT BEGINNING OF PERIOD	132,510,610	19,114,444
CASH AT END OF PERIOD	<u>\$ 103,991,231</u>	<u>\$ 59,713,424</u>
Supplementary disclosures:		
Interest paid	\$ 3,938	\$ 9,496

*The accompanying notes are an integral part of these unaudited consolidated financial statements.*

**Arrowhead Research Corporation**  
**Notes to Consolidated Financial Statements**  
**(unaudited)**

Unless otherwise noted, (1) the term “Arrowhead” refers to Arrowhead Research Corporation, a Delaware corporation, (2) the terms the “Company,” “we,” “us,” and “our,” refer to the ongoing business operations of Arrowhead and its Subsidiaries, whether conducted through Arrowhead or a subsidiary of Arrowhead, (3) the term “Subsidiaries” refers collectively to Arrowhead Madison Inc. (“Madison”) and Ablaris Therapeutics, Inc. (“Ablaris”), (4) the term “Common Stock” refers to Arrowhead’s Common Stock, (5) the term “Preferred Stock” refers to Arrowhead’s Preferred Stock and the term “Stockholder(s)” refers to the holders of Arrowhead Common Stock.

**NOTE 1. ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES**

*Nature of Business*

Arrowhead Research Corporation develops novel drugs to treat intractable diseases by silencing the genes that cause them. Using the broadest portfolio of RNA chemistries and efficient modes of delivery, Arrowhead therapies trigger the RNA interference mechanism to induce rapid, deep and durable knockdown of target genes. Arrowhead’s most advanced drug candidate in clinical development is ARC-520, which is designed to treat chronic hepatitis B infection by inhibiting the production of all HBV gene products. The goal is to reverse the immune suppression that prevents the body from controlling the virus and clearing the disease. Arrowhead’s second clinical candidate is ARC-AAT, a treatment for a rare liver disease associated with a genetic disorder that causes alpha-1 antitrypsin deficiency.

*Liquidity*

Historically, the Company’s primary source of financing has been through the sale of securities of Arrowhead. Research and development activities have required significant capital investment since the Company’s inception. We expect our operations to continue to require cash investment in fiscal 2015 and beyond as the Company pursues its research and development goals, as well as clinical trials and related drug manufacturing.

At December 31, 2014, the Company had \$104.0 million in cash to fund operations. In addition to its cash resources, the Company has invested excess cash in investment grade commercial bonds maturing in less than 24 months. These bonds provide a source of liquidity, though the Company plans to hold them until maturity. At December 31, 2014, the Company had invested \$41.3 million in bonds. During the three months ended December 31, 2014, the Company’s cash position decreased by \$28.5 million which was primarily the result of cash outflows related to continuing operating activities of \$24.2 million, other investing activities of \$7.0 million and capital expenditures of \$0.5 million. These outflows were partially offset by maturities of fixed income investments totaling \$3.1 million and proceeds from the exercise of warrants and options of \$0.3 million.

*Summary of Significant Accounting Policies*

**Principles of Consolidation**—The consolidated financial statements include the accounts of Arrowhead and its Subsidiaries. Arrowhead’s primary operating subsidiary is Arrowhead Madison, which is located in Madison, Wisconsin, where the Company’s research and development facility is located. All significant intercompany accounts and transactions are eliminated in consolidation.

**Basis of Presentation and Use of Estimates**—The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could materially differ from those estimates. Additionally, certain reclassifications have been made to prior period financial statements to conform to the current period presentation.

**Cash and Cash Equivalents**—The Company considers all liquid debt instruments purchased with a maturity of three months or less to be cash equivalents. The Company had no restricted cash at December 31, 2014 and September 30, 2014.

**Concentration of Credit Risk**—The Company maintains several bank accounts for its operations at two financial institutions. These accounts are insured by the Federal Deposit Insurance Corporation (FDIC) for up to \$250,000 per account. Management believes the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which these deposits are held.

Investments—The Company may invest excess cash balances in short-term and long-term marketable debt securities. Investments may consist of certificates of deposits, money market accounts, government-sponsored enterprise securities, corporate bonds and/or commercial paper. The Company accounts for its investment in marketable securities in accordance with FASB ASC 320, Investments – Debt and Equity Securities. This statement requires certain securities to be classified into three categories:

Held-to-maturity—Debt securities that the entity has the positive intent and ability to hold to maturity are reported at amortized cost.

Trading Securities—Debt and equity securities that are bought and held primarily for the purpose of selling in the near term are reported at fair value, with unrealized gains and losses included in earnings.

Available-for-Sale—Debt and equity securities not classified as either securities held-to-maturity or trading securities are reported at fair value with unrealized gains or losses excluded from earnings and reported as a separate component of shareholders' equity.

The Company classifies its investments in marketable debt securities based on the facts and circumstances present at the time of purchase of the securities. At December 31, 2014, the Company classified all of its investments as held-to-maturity.

Held-to-maturity investments are measured and recorded at amortized cost on the Company's Consolidated Balance Sheet. Discounts and premiums to par value of the debt securities are amortized to interest income/expense over the term of the security. No gains or losses on investment securities are realized until they are sold or a decline in fair value is determined to be other-than-temporary.

Property and Equipment—Property and equipment are recorded at cost, which may equal fair market value in the case of property and equipment acquired in conjunction with a business acquisition. Depreciation of property and equipment is recorded using the straight-line method over the respective useful lives of the assets ranging from three to seven years. Leasehold improvements are amortized over the lesser of the expected useful life or the remaining lease term. Long-lived assets, including property and equipment are reviewed for impairment whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable.

Intangible Assets Subject to Amortization—At December 31, 2014, intangible assets subject to amortization include certain license agreements. Intangible assets subject to amortization are reviewed for impairment whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable.

In-Process Research & Development (IPR&D)—IPR&D assets represent capitalized on-going research projects that were acquired through business combinations. Such assets are initially measured at their acquisition date fair values. The amounts capitalized are being accounted for as indefinite-lived intangible assets, subject to impairment testing until completion or abandonment of R&D efforts associated with the project. Upon successful completion of a project, Arrowhead will make a determination as to the then remaining useful life of the intangible asset and begin amortization. Arrowhead tests its indefinite-lived assets for impairment at least annually, through a two-step process. The first step is a qualitative assessment to determine if it is more likely than not that the indefinite lived assets are impaired. Arrowhead considers relevant events and circumstances that could affect the inputs used to determine the fair value of the intangible assets. If the qualitative assessment indicates that it is more likely than not that the intangible assets are impaired, a second step is performed which is a quantitative test to determine the fair value of the intangible asset. If the carrying amount of the intangible assets exceeds its fair value, an impairment loss is recorded in the amount of that excess. If circumstances determine that it is appropriate, the Company may also elect to bypass step one, and proceed directly to the second step.

Contingent Consideration - The consideration for the Company's acquisitions often includes future payments that are contingent upon the occurrence of a particular event. For example, milestone payments might be based on the achievement of various regulatory approvals or future sales milestones, and royalty payments might be based on drug product sales levels. The Company records a contingent consideration obligation for such contingent payments at fair value on the acquisition date. The Company estimates the fair value of contingent consideration obligations through valuation models designed to estimate the probability of such contingent payments based on various assumptions and incorporating estimated success rates. Estimated payments are discounted using present value techniques to arrive at estimated fair value at the balance sheet date. Changes in the fair value of our contingent consideration obligations are recognized within the Company's Consolidated Statements of Operations. Changes in the fair value of the contingent consideration obligations can result from changes to one or multiple inputs, including adjustments to the discount rates, changes in the amount or timing of expected expenditures associated with product development, changes in the amount or timing of cash flows from products upon commercialization, changes in the assumed achievement or timing of any development milestones, changes in the probability of certain clinical events and changes in the assumed probability associated with regulatory approval. These fair value measurements are based on significant inputs not observable in the market. Substantial judgment is employed in determining the appropriateness of these assumptions as of the acquisition date and for each subsequent period. Accordingly, changes in assumptions could have a material impact on the amount of contingent consideration expense the Company records in any given period.



**Revenue Recognition**—Revenue from license fees are recorded when persuasive evidence of an arrangement exists, title has passed or services have been rendered, a price is fixed and determinable, and collection is reasonably assured. The Company may generate revenue from product sales, technology licenses, collaborative research and development arrangements, and research grants. Revenue under technology licenses and collaborative agreements typically consists of nonrefundable and/or guaranteed technology license fees, collaborative research funding and various milestone and future product royalty or profit-sharing payments.

Payments under collaborative research and development agreements are recognized as revenue ratably over the relevant periods specified in the agreement, generally the period during which research and development is conducted. Revenue from up-front license fees, milestones and product royalties are recognized as earned based on the completion of the milestones and product sales, as defined in the respective agreements. Payments received in advance of recognition as revenue are recorded as deferred revenue.

**Allowance for Doubtful Accounts**—The Company accrues an allowance for doubtful accounts based on estimates of uncollectible revenues by analyzing historical collections, accounts receivable aging and other factors. Accounts receivable are written off when all collection attempts have failed.

**Research and Development**—Costs and expenses that can be clearly identified as research and development are charged to expense as incurred in accordance with FASB ASC 730-10. Included in research and development costs are operating costs, facilities, supplies, external services, clinical trial and manufacturing costs, overhead directly related to the Company's research and development operations, and costs to acquire technology licenses.

**Earnings (Loss) per Share**—Basic earnings (loss) per share is computed using the weighted-average number of common shares outstanding during the period. Diluted earnings (loss) per share are computed using the weighted-average number of common shares and dilutive potential common shares outstanding during the period. Dilutive potential common shares primarily consist of stock options and restricted stock units issued to employees and warrants to purchase Common Stock of the Company. All outstanding stock options, restricted stock units and warrants for the three months ended December 31, 2014 and 2013 have been excluded from the calculation of Diluted earnings (loss) per share due to their anti-dilutive effect.

**Stock-Based Compensation**—The Company accounts for share-based compensation arrangements in accordance with FASB ASC 718, which requires the measurement and recognition of compensation expense for all share-based payment awards to be based on estimated fair values. The Company uses the Black-Scholes option valuation model to estimate the fair value of its stock options at the date of grant. The Black-Scholes option valuation model requires the input of subjective assumptions to calculate the value of stock options. The Company uses historical data and other information to estimate the expected price volatility and the expected forfeiture rate.

**Derivative Assets and Liabilities** – The Company accounts for warrants and other derivative financial instruments as either equity or assets/liabilities based upon the characteristics and provisions of each instrument. Warrants classified as equity are recorded as additional paid-in capital on the Company's Consolidated Balance Sheet and no further adjustments to their valuation are made. Some of the Company's warrants were determined to be ineligible for equity classification because of provisions that may result in an adjustment to their exercise price. Warrants classified as derivative liabilities and other derivative financial instruments that require separate accounting as assets or liabilities are recorded on the Company's Consolidated Balance Sheet at their fair value on the date of issuance and are revalued on each subsequent balance sheet date until such instruments are exercised or expire, with any changes in the fair value between reporting periods recorded as other income or expense. The Company estimates the fair value of these assets/liabilities using option pricing models that are based on the individual characteristics of the warrants or instruments on the valuation date, as well as assumptions for expected volatility, expected life and risk-free interest rate.

**Income Taxes**—The Company accounts for income taxes under the liability method, which requires the recognition of deferred income tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each period end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established, when necessary, to reduce deferred income tax assets to the amount expected to be realized. The provision for income taxes, if any, represents the tax payable for the period and the change in deferred income tax assets and liabilities during the period.

**NOTE 2. PROPERTY AND EQUIPMENT**

The following table summarizes our major classes of property and equipment:

	December 31, 2014	September 30, 2014
Computers, office equipment and furniture	\$ 374,535	\$ 334,162
Research equipment	5,010,151	4,614,176
Software	69,623	69,623
Leasehold improvements	3,117,537	3,045,022
Total gross fixed assets	8,571,846	8,062,983
Less: Accumulated depreciation and amortization	(4,447,405)	(4,190,230)
Property and equipment, net	\$ 4,124,441	\$ 3,872,753

**NOTE 3. INVESTMENTS**

The Company invests its excess cash balances in short-term and long-term debt securities. Investments at December 31, 2014 consisted of corporate bonds with maturities remaining of less than two years at the time of purchase. The Company may also invest excess cash balances in certificates of deposit, money market accounts, US Treasuries, US government agency obligations, corporate debt securities, and/or commercial paper. The Company accounts for its investments in accordance with FASB ASC 320, Investments – Debt and Equity Securities. At December 31, 2014, all investments were classified as held-to-maturity securities.

The following tables summarize the Company's short and long-term investments as of December 31, 2014, and September 30, 2014.

	As of December 31, 2014			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Commercial notes (due within one year)	\$ 23,532,402	\$ —	\$ (313,407)	\$ 23,218,995
Commercial notes (due after one year through two years)	\$ 17,806,499	—	\$ (266,426)	\$ 17,540,073
Total	\$ 41,338,901	\$ —	\$ (579,833)	\$ 40,759,068

	As of September 30, 2014			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Commercial notes (due within one year)	\$ 21,653,032	\$ —	\$ (189,830)	\$ 21,463,202
Commercial notes (due after one year through two years)	\$ 23,088,346	—	\$ (217,693)	\$ 22,870,653
Total	\$ 44,741,378	\$ —	\$ (407,523)	\$ 44,333,855

**NOTE 4. INTANGIBLE ASSETS**

Intangible assets consist of in-process research and development (“IPR&D”) not subject to amortization, and license agreements subject to amortization, which were capitalized as a part of a business combination.

IPR&D represents projects that have not yet received regulatory approval and are required to be classified as indefinite assets until the successful completion or the abandonment of the associated R&D efforts. Accordingly, during the development period after the date of acquisition, these assets will not be amortized until approval is obtained in one or more jurisdictions which, individually or combined, are expected to generate a significant portion of the total revenue expected to be earned by an IPR&D project. At that time, the Company will determine the useful life of the asset, reclassify the asset out of IPR&D and begin amortization. If the associated R&D effort is abandoned the related IPR&D assets will likely be written off and the Company would record an impairment loss.

Intangible assets not subject to amortization include IPR&D capitalized as part of a business combination from the acquisition of Roche Madison.

Intangible assets subject to amortization include license agreements capitalized as part of a business combination from the acquisition of Roche Madison. The license agreements are being amortized over the estimated life remaining at the time of acquisition, which was 4 years, and the accumulated amortization of the assets is approximately \$175,100. Amortization expense for the three months ended December 31, 2014 and 2013 was \$13,700 and \$13,700, respectively. Amortization expense is expected to be approximately \$41,900 for the remainder of fiscal year 2015, \$13,000 in 2016, and zero thereafter.

The following table provides details on the Company's intangible asset balances:

	Intangible assets not subject to amortization	Intangible assets subject to amortization	Total Intangible assets
Balance at September 30, 2013	\$ 3,117,322	\$ 123,191	\$ 3,240,513
Impairment	(2,172,387)	-	(2,172,387)
Amortization	-	(54,653)	(54,653)
Balance at September 30, 2014	\$ 944,935	\$ 68,538	\$ 1,013,473
Amortization	-	(13,664)	(13,664)
Balance at December 31, 2014	<u>\$ 944,935</u>	<u>\$ 54,874</u>	<u>\$ 999,809</u>

#### NOTE 5. STOCKHOLDERS' EQUITY

At December 31, 2014, the Company had a total of 150,000,000 shares of capital stock authorized for issuance, consisting of 145,000,000 shares of Common Stock, par value \$0.001 per share, and 5,000,000 shares of Preferred Stock, par value \$0.001 per share.

At December 31, 2014, 54,715,714 shares of Common Stock were outstanding. Additionally, 18,300 shares of Preferred Stock were outstanding, including 2,300 shares of Series B Preferred Stock, convertible into 1,256,831 shares of Common Stock, and 16,000 shares of Series C Preferred Stock, convertible into 2,730,375 shares of Common Stock. At December 31, 2014, 7,274,674 shares of Common Stock were reserved for issuance upon exercise of options and vesting of restricted stock units granted or available for grant under Arrowhead's 2004 Equity Incentive Plan and 2013 Incentive Plan, as well as for inducement grants made to new employees.

The Preferred Stock is convertible to Common Stock by its holder at its stated conversion price, though it is not convertible to the extent the holder would beneficially own more than 9.99% of the number of shares of outstanding Common Stock immediately after the conversion. The holders of Preferred Stock are eligible to vote with the Common Stock of the Company on an as-converted basis, but only to the extent they are eligible for conversion without exceeding the 9.99% ownership limitation. The Preferred Stock does not carry a coupon, but it is entitled to receive dividends on a pari passu basis with Common Stock, when and if declared. In any liquidation or dissolution of the Company, the holders of Preferred Stock are entitled to participate in the distribution of the assets, to the extent legally available for distribution, on a pari passu basis with the Common Stock.

On October 11, 2013, the Company sold 3,071,672 shares of Common Stock, at a price of \$5.86 per share, and 46,000 shares of Series C Preferred Stock, at a price of \$1,000 per share. The Preferred Shares are convertible into shares of common stock at a conversion price of \$5.86. The aggregate purchase price paid by the purchasers for the Common Stock and Series C Preferred Stock was \$64,000,000 and the Company received net proceeds of approximately \$60,000,000, after advisory fees and offering expenses.

On February 24, 2014, the Company sold 6,325,000 shares of Common Stock, at a public offering price of \$18.95 per share. Net proceeds were approximately \$112.6 million after underwriting commissions and discounts and other offering expenses.

The following table summarizes information about warrants outstanding at December 31, 2014:

Exercise prices	Number of Warrants	Remaining Life in Years
\$ 70.60	94,897	2.4
\$ 5.00	390,625	0.7
\$ 5.09	239,534	0.5
\$ 1.38	24,324	1.0
\$ 4.16	1,000	2.0
\$ 3.25	334,347	1.6
\$ 2.12	75,000	3.0
\$ 1.83	277,284	3.0
Total warrants outstanding	<u>1,437,011</u>	

**NOTE 6. COMMITMENTS AND CONTINGENCIES***Leases*

The Company leases office space for its corporate headquarters in Pasadena, California. In March 2014, the Company signed a lease addendum to expand its corporate headquarters, and the new space became available in September 2014. The leases for the expansion space and the current space will expire in September 2019. Rental costs, including the expansion space, are approximately \$23,000 per month, increasing approximately 3% annually.

The Company's research facility in Madison, Wisconsin is leased through February 28, 2019. Monthly rental expense is approximately \$25,000. Other monthly rental expenses include common area maintenance and real estate taxes totaling approximately \$16,000 per month. Utilities costs are approximately \$15,000 per month. Total monthly costs are approximately \$75,000 per month, including monthly payments recorded under a capital lease of approximately \$19,000.

Facility rent expense for the three months ended December 31, 2014 and 2013 was \$171,500 and \$145,000, respectively.

As of December 31, 2014, future minimum lease payments due in fiscal years under capitalized leases are as follows:

2015 (remainder of)	\$ 171,315
2016	228,420
2017	228,420
2018	228,420
2019	95,178
2020 and thereafter	-
Less interest	(32,589)
Principal	919,164
Less current portion	(213,991)
Noncurrent portion	<u>\$ 705,173</u>

As of December 31, 2014, future minimum lease payments due in fiscal years under operating leases are as follows:

2015 (remainder of)	\$ 436,532
2016	596,877
2017	613,664
2018	637,897
2019	459,633
2020 and thereafter	-
Total	<u>\$ 2,744,603</u>

*Litigation*

The Company, its Chief Executive Officer and its Chief Operating Officer have been named as defendants in two securities class actions filed in the United States District Court for the Central District of California regarding certain public statements in connection with the Company's hepatitis B drug research. Both actions assert claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and seek damages in an unspecified amount. Additionally, three putative stockholder derivative action have been filed in the United States District Court for the Central District of California, alleging breach of fiduciary duty by the Company's Board of Directors in connection with the facts underlying the Securities Claims. Each of these five suits seek damages in unspecified amounts and some seek various forms of injunctive relief.

The Company and two of its former executives have been named as defendants in a complaint filed by William Marsh Rice University ("Rice University") currently pending in the United States District Court for the Southern District of Texas relating to alleged breaches of a license agreement between Rice University and the Company's former subsidiary, Unidym, Inc. The plaintiff has alleged that the Company and its former executives acted fraudulently with respect to Unidym's license from Rice University and seeks injunctive relief, damages, including unspecified compensatory and punitive damages, and attorneys' fees.

The Company believes it has a meritorious defense and intends to vigorously defend itself in each of the above matters. The Company makes provisions for liabilities when it is both probable that a liability has been incurred and the amount can be reasonably estimated. No such liability has been recorded related to these matters. The Company does not expect these matters to have any material effect on its Consolidated Financial Statements. With regard to legal fees, such as attorney fees related to these matters or any other legal matters, the Company's accounting policy is to recognize such cost as incurred.

### Purchase Commitments

In the normal course of business, we enter into various purchase commitments for the manufacture of drug components, toxicology studies, and for clinical studies. As of December 31, 2014, these future commitments were approximately \$43.1 million, of which approximately \$31.6 million is expected to be incurred in the remainder of fiscal 2015, and \$11.5 million is expected to be incurred beyond fiscal 2015.

### Technology License Commitments

The Company has licensed from third parties the rights to use certain technologies that it uses in its research and development activities, as well as in any products the Company may develop using these licensed technologies. These agreements and other similar agreements often require milestone and royalty payments. Milestone payments, for example, may be required as the research and development process progresses through various stages of development, such as when clinical candidates enter or progress through clinical trials, upon NDA and upon certain sales level milestones. These milestone payments could amount to the mid to upper double digit millions of dollars. In certain agreements, the Company may be required to make mid to high single digit percentage royalty payments based on a percentage of the sales of the relevant products.

### NOTE 7. STOCK-BASED COMPENSATION

Arrowhead has two plans that provide for equity-based compensation. Under the 2004 Equity Incentive Plan and 2013 Incentive Plan, 2,657,352 and 4,000,000 shares, respectively, of Arrowhead's Common Stock are reserved for the grant of stock options, stock appreciation rights, restricted stock awards and performance unit/share awards by the Board of Directors to employees, consultants and others. As of December 31, 2014, there were options granted and outstanding to purchase 2,561,018 and 1,686,000 shares of Common Stock under the 2004 Equity Incentive Plan and the 2013 Incentive Plan, respectively, and there were 470,000 restricted stock units granted and outstanding under the 2013 Incentive Plan. Also, as of December 31, 2014, there were 617,322 shares reserved for options and restricted stock units issued as inducement grants to new employees outside of equity compensation plans. During the three months ended December 31, 2014, no options were granted under the 2004 Equity Incentive Plan, 864,000 options were granted under the 2013 Incentive Plan, and 120,000 options and 30,000 restricted stock units were granted as inducement awards to new employees outside of equity incentive plans. Additionally, the Company's 2000 Stock Option Plan and the 38,000 stock options that were outstanding under the 2000 Stock Option Plan expired during the three months ended December 31, 2014.

The following tables summarize information about stock options:

	Number of Options Outstanding	Weighted- Average Exercise Price Per Share	Weighted- Average Remaining Contractual Term	Aggregate Intrinsic Value
Balance At September 30, 2013	3,419,285	\$ 4.68		
Granted	1,039,000	14.05		
Cancelled	(152,582)	6.05		
Exercised	(454,863)	6.00		
Balance At September 30, 2014	3,850,840	6.99		
Granted	984,000	5.45		
Cancelled	(38,000)	18.46		
Exercised	(2,500)	5.19		
Balance At December 31, 2014	4,794,340	\$ 6.59	8.4 years	\$ 11,479,110
Exercisable At December 31, 2014	1,860,703	\$ 5.80	7.3 years	\$ 5,106,714

Stock-based compensation expense related to stock options for the three months ended December 31, 2014 and 2013 was \$981,399 and \$521,138, respectively. The Company does not recognize an income tax benefit as the Company is currently operating at a loss and an actual income tax benefit may not be realized. For non-qualified stock options, the loss creates a timing difference, resulting in a deferred tax asset, which is fully reserved by a valuation allowance.

The fair value of the options granted by Arrowhead for the three months ended December 31, 2014 and 2013 is estimated at \$3,596,618 and \$531,510, respectively.

The intrinsic value of the options exercised during the three months ended December 31, 2014 and 2013 was \$23,774 and \$314,858, respectively.

As of December 31, 2014, the pre-tax compensation expense for all outstanding unvested stock options in the amount of approximately \$13,093,446 will be recognized in our results of operations over a weighted average period of 3.1 years.

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model. The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options, which do not have vesting restrictions and are fully transferable. The determination of the fair value of each stock option is affected by our stock price on the date of grant, as well as assumptions regarding a number of highly complex and subjective variables. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

The assumptions used to value stock options are as follows:

	<b>Three months ended December 31,</b>	
	<b>2014</b>	<b>2013</b>
Dividend yield	—	—
Risk-free interest rate	1.61 – 1.85%	1.90%
Volatility	75%	69%
Expected life (in years)	6.25	6.25
Weighted average grant date fair value per share of options granted	\$3.66	\$5.06

The dividend yield is zero as the Company currently does not pay a dividend.

The risk-free interest rate is based on the U.S. Treasury bond.

Volatility is estimated based on volatility average of the Company's Common Stock price.

#### *Restricted Stock Units*

Restricted Stock Units (RSUs) were granted under the Company's 2013 Incentive Plan and inducement grants granted outside of the Plan. During the three months ended December 31, 2014 and 2013, the Company issued 30,000 and 0 restricted stock units, respectively, to certain members of management. Of the restricted stock units granted during the three months ended December 31, 2014, 30,000 were granted outside of the Plan as an inducement grant to a new employee. At vesting each RSU will be exchanged for one share of the Company's Common Stock. The RSUs issued during the three months ended December 31, 2014 vest in equal annual installments over three years from the date of grant.

The following table summarizes the activity of the Company's Restricted Stock Units:

	<b>Number of RSUs</b>	<b>Weighted- Average Grant Date Fair Value</b>
Unvested at September 30, 2013	—	\$ —
Granted	510,000	14.58
Vested	—	—
Forfeited	—	—
Unvested at September 30, 2014	510,000	\$ 14.58
Granted	30,000	5.22
Vested	—	—
Forfeited	—	—
Unvested at December 31, 2014	<u>540,000</u>	<u>\$ 14.06</u>

The Company recorded \$1,033,457 and \$0 of expense relating to restricted stock units during the three months ended December 31, 2014 and 2013, respectively, and such expense is included in stock-based compensation expense in the Company's Consolidated Statement of Operations.

As of December 31, 2014, the pre-tax compensation expense for all unvested restricted stock units in the amount of approximately \$4,036,658 will be recognized in the Company's results of operations over a weighted average period of 1.4 years.

## NOTE 8. FAIR VALUE MEASUREMENTS

The Company measures its financial assets and liabilities at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., exit price) in an orderly transaction between market participants at the measurement date. Additionally, the Company is required to provide disclosure and categorize assets and liabilities measured at fair value into one of three different levels depending on the assumptions (i.e., inputs) used in the valuation. Level 1 provides the most reliable measure of fair value while Level 3 generally requires significant management judgment. Financial assets and liabilities are classified in their entirety based on the lowest level of input significant to the fair value measurement. The fair value hierarchy is defined as follows:

Level 1—Valuations are based on unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2—Valuations are based on quoted prices for similar assets or liabilities in active markets, or quoted prices in markets that are not active for which significant inputs are observable, either directly or indirectly.

Level 3—Valuations are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. Inputs reflect management's best estimate of what market participants would use in valuing the asset or liability at the measurement date.

The following table summarizes fair value measurements at December 31, 2014 and September 30, 2014 for assets and liabilities measured at fair value on a recurring basis:

December 31, 2014:

	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	\$ 103,991,231	\$ —	\$ —	\$ 103,991,231
Derivative liabilities	\$ —	\$ —	\$ 1,790,559	\$ 1,790,559
Acquisition-related contingent consideration obligations	\$ —	\$ —	\$ 3,970,931	\$ 3,970,931

September 30, 2014:

	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	\$ 132,510,610	\$ —	\$ —	\$ 132,510,610
Derivative liabilities	\$ —	\$ —	\$ 4,173,943	\$ 4,173,943
Acquisition-related contingent consideration obligations	\$ —	\$ —	\$ 3,970,931	\$ 3,970,931

The Company invests its excess cash balances in short and long-term corporate bonds, generally with remaining maturities of less than two years. At December 31, 2014, the Company had short-term investments of \$23,532,402, and long-term investments of \$17,806,499, for a total of \$41,338,901. The fair value of its investment at December 31, 2014 was \$40,759,068. The Company expects to hold such investments until maturity, and thus unrealized gains and losses from the fluctuations in the fair value of the securities are not likely to be realized.

As part of an equity financing in June 2010, Arrowhead issued warrants to acquire up to 329,649 shares of Common Stock (the "2010 Warrants"), of which 24,324 warrants were outstanding at December 31, 2014. Similarly, as part of a financing in December 2012, Arrowhead issued warrants to acquire up to 912,543 shares of Common Stock (the "2012 Warrants") of which 265,161 warrants were outstanding at December 31, 2014. Further, as part of a financing in January 2013, Arrowhead issued warrants to acquire up to 833,530 shares of Common Stock (the "2013 Warrants") of which 12,123 warrants were outstanding at December 31, 2014 (collectively the "Warrants"). Each of the Warrants discussed above contains a mechanism to adjust the strike price upon the issuance of certain dilutive equity securities. If during the terms of the Warrants, the Company issues Common Stock at a price lower than the exercise price for the Warrants, the exercise price would be reduced to the amount equal to the issuance price of the Common Stock. As a result of these features, the Warrants are subject to derivative accounting as prescribed under ASC 815. Accordingly, the fair value of the Warrants on the date of issuance was estimated using an option pricing model and recorded on the Company's Consolidated Balance Sheet as a derivative liability. The fair value of the Warrants is estimated at the end of each reporting period and the change in the fair value of the Warrants is recorded as a non-operating gain or loss as change in value of derivatives in the Company's Consolidated Statement of Operations. During the three months ended December 31, 2014, the Company recorded a non-cash gain from the change in fair value of the derivative liability of \$2,179,651, and during the three months ended December 31, 2013, the Company recorded a non-cash loss of \$3,507,496.

The assumptions used in valuing the derivative liability were as follows:

<b>2010 Warrants</b>	<u>December 31, 2014</u>	<u>September 30, 2014</u>
Risk free interest rate	0.25%	0.13%
Expected life	1.0 Years	1.2 Years
Dividend yield	None	None
Volatility	75%	69%
<b>2012 Warrants</b>	<u>December 31, 2014</u>	<u>September 30, 2014</u>
Risk free interest rate	1.10%	1.07%
Expected life	3.0 Years	3.2 Years
Dividend yield	None	None
Volatility	75%	69%
<b>2013 Warrants</b>	<u>December 31, 2014</u>	<u>September 30, 2014</u>
Risk free interest rate	1.10%	1.07%
Expected life	3.1 Years	3.3 Years
Dividend yield	None	None
Volatility	75%	69%

The following is a reconciliation of the derivative liability related to these warrants:

Value at September 30, 2013	\$ 4,091,797
Issuance of instruments	—
Change in value	5,821,796
Net settlements	(5,956,079)
Value at September 30, 2014	\$ 3,957,514
Issuance of instruments	—
Change in value	(2,179,651)
Net settlements	—
Value at December 31, 2014	<u>\$ 1,777,863</u>

In conjunction with the financing of Ablaris in fiscal 2011, Arrowhead sold exchange rights to certain investors whereby the investors have the right to exchange their shares of Ablaris for a prescribed number of Arrowhead shares of Common Stock based upon a predefined ratio. The exchange rights have a seven-year term. During the first year, the exchange right allows the holder to exchange one Ablaris share for 0.06 Arrowhead shares. This ratio declines to 0.04 in the second year, 0.03 in the third year and 0.02 in the fourth year. In the fifth year and beyond the exchange ratio is 0.01. Exchange rights for 675,000 Ablaris shares were sold in fiscal 2011, and 585,000 remain outstanding at December 31, 2014. The exchange rights are subject to derivative accounting as prescribed under ASC 815. Accordingly, the fair value of the exchange rights on the date of issuance was estimated using an option pricing model and recorded on the Company's Consolidated Balance Sheet as a derivative liability. The fair value of the exchange rights is estimated at the end of each reporting period and the change in the fair value of the exchange rights is recorded as a non-operating gain or loss in the Company's Consolidated Statement of Operations. During the three months ended December 31, 2014, the Company recorded a non-cash gain from the change in fair value of the derivative liability of \$202,491 and during the three months ended December 31, 2013, the Company recorded a non-cash loss of \$12,082.

The assumptions used in valuing the derivative liability were as follows:

	<u>December 31,</u>	<u>September 30,</u>
	<u>2014</u>	<u>2014</u>
Risk free interest rate	1.27%	1.07%
Expected life	3.0 Years	3.3 Years
Dividend yield	None	None
Volatility	75%	100%



The following is a reconciliation of the derivative liability related to these exchange rights:

Value at September 30, 2013	\$ 4,569
Issuance of instruments	—
Change in value	211,860
Net settlements	—
Value at September 30, 2014	\$ 216,429
Issuance of instruments	—
Change in value	(202,491)
Net settlements	(1,242)
Value at December 31, 2014	<u>\$ 12,696</u>

The derivative assets/liabilities are estimated using option pricing models that are based on the individual characteristics of the warrants or instruments on the valuation date, as well as assumptions for expected volatility, expected life and risk-free interest rate. Changes in the assumptions used could have a material impact on the resulting fair value. The primary input affecting the value of our derivatives liabilities is the Company's stock price. Other inputs have a comparatively insignificant effect.

As of December 31, 2014, the Company has a liability for contingent consideration related to its acquisition of Roche Madison Inc. The fair value measurement of the contingent consideration obligations is determined using Level 3 inputs. The fair value of contingent consideration obligations is based on a discounted cash flow model using a probability-weighted income approach. The measurement is based upon unobservable inputs supported by little or no market activity based on the Company's assumptions and experience. Estimating timing to complete the development and obtain approval of products is difficult, and there are inherent uncertainties in developing a product candidate, such as obtaining U.S. Food and Drug Administration (FDA) and other regulatory approvals. In determining the probability of regulatory approval and commercial success, the Company utilizes data regarding similar milestone events from several sources, including industry studies and its own experience. These fair value measurements represent Level 3 measurements as they are based on significant inputs not observable in the market. Significant judgment is employed in determining the appropriateness of these assumptions as of the acquisition date and for each subsequent period. Accordingly, changes in assumptions could have a material impact on the amount of contingent consideration expense the Company records in any given period. Changes in the fair value of the contingent consideration obligations are recorded in the Company's Consolidated Statement of Operations.

The following is a reconciliation of contingent consideration fair value.

Value at September 30, 2013	\$ 1,595,273
Purchase price contingent consideration	—
Contingent consideration payments	—
Change in fair value of contingent consideration	2,375,658
Value at September 30, 2014	\$ 3,970,931
Purchase price contingent consideration	—
Contingent consideration payments	—
Change in fair value of contingent consideration	—
Value at December 31, 2014	<u>\$ 3,970,931</u>

The fair value of contingent consideration obligations is estimated through valuation models designed to estimate the probability of such contingent payments based on various assumptions and incorporating estimated success rates. Estimated payments are discounted using present value techniques to arrive at estimated fair value at the balance sheet date. Changes in the fair value of the contingent consideration obligations can result from changes to one or multiple inputs, including adjustments to the discount rates, changes in the amount or timing of expected expenditures associated with product development, changes in the amount or timing of cash flows from products upon commercialization, changes in the assumed achievement or timing of any development milestones, changes in the probability of certain clinical events and changes in the assumed probability associated with regulatory approval. Each of these assumptions can have a significant impact on the calculation of contingent consideration.

The carrying amounts of the Company's other financial instruments, which include accounts receivable, accounts payable, and accrued expenses approximate their respective fair values due to the relatively short-term nature of these instruments. The carrying value of the Company's debt obligations approximates fair value based on market interest rates.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*This Quarterly Report on Form 10-Q contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and we intend that such forward-looking statements be subject to the safe harbors created thereby. For this purpose, any statements contained in this Quarterly Report on Form 10-Q except for historical information may be deemed to be forward-looking statements. Without limiting the generality of the foregoing, words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," or "continue" or the negative or other variations thereof or comparable terminology are intended to identify forward-looking statements. In addition, any statements that refer to projections of our future financial performance, trends in our businesses, or other characterizations of future events or circumstances are forward-looking statements.*

*The forward-looking statements included herein are based on current expectations of our management based on available information and involve a number of risks and uncertainties, all of which are difficult or impossible to predict accurately and many of which are beyond our control. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Readers should carefully review the factors identified in this report under the caption "Risk Factors" as well as the additional risks described in other documents we file from time to time with the Securities and Exchange Commission ("SEC"), including our most recent Annual Report on Form 10-K and subsequent quarterly reports on Form 10-Q. In light of the significant risks and uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by us or any other person that such results will be achieved, and readers are cautioned not to place undue reliance on such forward-looking information. Except as may be required by law, we disclaim any intent to revise the forward-looking statements contained herein to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.*

### Overview

Arrowhead Research develops novel drugs to treat intractable diseases by silencing the genes that cause them. Using the broadest portfolio of RNA chemistries and efficient modes of delivery, Arrowhead therapies trigger the RNA interference mechanism to induce rapid, deep and durable knockdown of target genes. Arrowhead's most advanced drug candidate in clinical development is ARC-520, which is designed to treat chronic hepatitis B infection by inhibiting the production of all HBV gene products. The goal is to reverse the immune suppression that prevents the body from controlling the virus and clearing the disease. Arrowhead's second clinical candidate is ARC-AAT, a treatment for a rare liver disease associated with a genetic disorder that causes alpha-1 antitrypsin deficiency.

Arrowhead operates a lab facility in Madison, Wisconsin, where the Company's research and development activities, including the development of its RNAi therapeutics, are based. The Company's principal executive offices are located in Pasadena, California.

During the first quarter of fiscal year 2015, the Company continued to develop its lead clinical candidate, ARC-520, for the treatment of chronic hepatitis B as well as its second clinical candidate, ARC-AAT, an RNAi therapeutic designed to treat liver disease associated with Alpha-1 antitrypsin deficiency (AATD). The Company continues its Phase 2a studies in ARC-520, with no dose-limiting toxicities or serious adverse events having been observed to date. The Company submitted an Investigational New Drug application to the U.S. Food and Drug Administration in December 2014 for ARC-520 to initiate phase 2b multi-dose studies to determine the depth of hepatitis B surface antigen (HBsAg) reduction following ARC-520 injection. The Company received feedback from the FDA, and based on that feedback the Company expects to adjust the protocol in order to begin the trial. The Company also expects to file with Asian and European agencies to begin additional phase 2b studies in fiscal year 2015. Additionally, the Company has submitted an application for ARC-AAT and expects to begin a phase 1 clinical trial soon.

The Company continues to develop other clinical candidates for future clinical trials, focusing on intravenously-administered therapeutics targeting gene knockdown in the liver, as well as formulations for administering RNAi-based therapeutics by subcutaneous administration. Clinical candidates are tested internally through GLP toxicology studies at outside laboratories, and drug materials for such studies, and for clinical trials, are contracted to third-party manufacturers when cGMP production is required. The Company engages third-party contract research organizations (CROs) to manage clinical trials and works cooperatively with such organizations on all aspects of clinical trial management, including plan design, patient recruiting, and follow up. These outside costs, relating to the preparation for and administration of clinical trials, are referred to as program costs, and if the clinical candidates progress through human testing, program costs will increase.

Net losses were \$22.6 million and \$10.7 million during the three months ended December 31, 2014 and 2013, respectively. Diluted losses per share were \$0.41 and \$0.28 during the three months ended December 31, 2014 and 2013, respectively.

The Company also substantially strengthened its liquidity and financial position through two securities offerings completed in October 2013 and February 2014 which generated approximately \$172.6 million of cash proceeds for the Company. These cash proceeds secured the funding needed to advance both ARC-520 and ARC-AAT through future clinical trials and will also assist as the Company expands its pipeline of other clinical candidates. The Company had \$104.0 million of Cash and Cash Equivalents and \$162.1 million of Total Assets as of December 31, 2014 as compared to \$132.5 million and \$182.8 million as of September 30, 2014, respectively. The decrease in Cash and Cash Equivalents and Total Assets reflects cash outflows associated with the Company's research and development efforts for its clinical candidates and pipeline. Based upon the Company's current cash resources and operating plan, the Company expects to have sufficient liquidity to fund operations for at least the next twelve months.

### ***Critical Accounting Policies and Estimates***

Management makes certain judgments and uses certain estimates and assumptions when applying accounting principles generally accepted in the United States in the preparation of our Consolidated Financial Statements. We evaluate our estimates and judgments on an ongoing basis and base our estimates on historical experience and on assumptions that we believe to be reasonable under the circumstances. Our experience and assumptions form the basis for our judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may vary from what we anticipate and different assumptions or estimates about the future could change our reported results. We believe the following accounting policies are the most critical to us, in that they are important to the portrayal of our Consolidated Financial Statements and require our most difficult, subjective or complex judgments in the preparation of our consolidated financial statements. For further information, see *Note 1, Organization and Significant Accounting Policies*, to our Consolidated Financial Statements, which outlines our application of significant accounting policies.

#### ***Revenue Recognition***

Revenue from product sales are recorded when persuasive evidence of an arrangement exists, title has passed and delivery has occurred, a price is fixed and determinable, and collection is reasonably assured.

We may generate revenue from technology licenses, collaborative research and development arrangements, research grants and product sales. Revenue under technology licenses and collaborative agreements typically consists of nonrefundable and/or guaranteed technology license fees, collaborative research funding, and various milestone and future product royalty or profit-sharing payments.

Revenue associated with research and development funding payments under collaborative agreements is recognized ratably over the relevant periods specified in the agreement, generally the research and development period. Revenue from up-front license fees, milestones and product royalties are recognized as earned based on the completion of the milestones and product sales, as defined in the respective agreements. Payments received in advance of recognition as revenue are recorded as deferred revenue.

#### ***Impairment of Long-lived Assets***

We review long-lived assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of assets may not be fully recoverable or that our assumptions about the useful lives of these assets are no longer appropriate. If impairment is indicated, recoverability is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset.

#### ***Impairment of Intangible assets***

Intangible assets consist of in-process research and development and license agreements acquired in conjunction with a business acquisition. Intangible assets are monitored for potential impairment whenever events or circumstances indicate that the carrying amount may not be recoverable, and are also reviewed annually to determine whether any impairment is necessary. Based on ASC 350, the annual review of intangible assets is performed via a two-step process. First, a qualitative assessment is performed to determine if it is more likely than not that the intangible asset is impaired. If required, a quantitative assessment is performed and, if necessary, impairment is recorded.

### Stock-Based Compensation

We recognize stock-based compensation expense for stock options based on the grant date fair value using the Black-Scholes options pricing model, which requires us to make assumptions regarding certain variables including the risk-free interest rate, expected stock price volatility, assumed forfeitures, and the expected life of the award. The grant date fair value of restricted stock units granted is based upon the quoted closing market price per share on the date of grant, adjusted for assumed forfeitures. Expense for stock options and restricted stock units is recognized over the requisite service period. The assumptions used in calculating stock-based compensation expense represent management's best estimates, but these estimates involve inherent uncertainties, and if factors change or the Company used different assumptions, its stock-based compensation expense could be materially different in the future.

### Derivative Assets and Liabilities

We account for warrants and other derivative financial instruments as either equity or assets/liabilities based upon the characteristics and provisions of each instrument. Warrants classified as equity are recorded as additional paid-in capital on our Consolidated Balance Sheet and no further adjustments to their valuation are made. Some of our warrants were determined to be ineligible for equity classification because of provisions that may result in an adjustment to their exercise price. Warrants classified as derivative liabilities and other derivative financial instruments that require separate accounting as assets or liabilities are recorded on our Consolidated Balance Sheet at their fair value on the date of issuance and are revalued on each subsequent balance sheet date until such instruments are exercised or expire, with any changes in the fair value between reporting periods recorded as other income or expense. We estimate the fair value of these assets/liabilities using option pricing models that are based on the individual characteristics of the warrants or instruments on the valuation date, as well as assumptions for expected volatility, expected life and risk-free interest rate. Changes in the assumptions used could have a material impact on the resulting fair value. The primary input affecting the value of our derivatives liabilities is the Company's stock price.

### Contingent Consideration

The consideration for our acquisitions often includes future payments that are contingent upon the occurrence of a particular event. For example, milestone payments might be based on the achievement of various regulatory approvals or future sales milestones, and royalty payments might be based on drug product sales levels. The Company records a contingent consideration obligation for such contingent payments at fair value on the acquisition date. The Company estimates the fair value of contingent consideration obligations through valuation models designed to estimate the probability of the occurrence of such contingent payments based on various assumptions and incorporating estimated success rates. Estimated payments are discounted using present value techniques to arrive at estimated fair value at the balance sheet date. Changes in the fair value of our contingent consideration obligations are recognized within our Consolidated Statements of Operations. Changes in the fair value of the contingent consideration obligations can result from changes to one or multiple inputs, including adjustments to the discount rates, changes in the amount or timing of expected expenditures associated with product development, changes in the amount or timing of cash flows from products upon commercialization, changes in the assumed achievement or timing of any development milestones, changes in the probability of certain clinical events and changes in the assumed probability associated with regulatory approval. These fair value measurements are based on significant inputs not observable in the market. Substantial judgment is employed in determining the appropriateness of these assumptions as of the acquisition date and for each subsequent period. Accordingly, changes in assumptions could have a material impact on the amount of contingent consideration expense the Company records in any given period.

## Results of Operations

The following data summarizes our results of operations for the following periods indicated:

	<u>Three Months Ended</u> <u>December 31, 2014</u>	<u>Three Months Ended</u> <u>December 31, 2013</u>
Revenue	\$ 170,750	\$ 43,750
Operating Loss	(25,115,276)	(7,009,382)
Loss from Continuing Operations	(22,575,282)	(10,685,732)
Net Loss	(22,575,282)	(10,685,732)
Earnings per Share (Basic and Diluted)	\$ (0.41)	\$ (0.28)

The increase in our Operating Expenses during the three months ended December 31, 2014 is primarily due to the continued development of our lead clinical candidate for HBV, ARC-520 and our second clinical candidate ARC-AAT for AATD. The primary costs incurred during fiscal 2015 related to manufacturing of clinical supplies for our clinical trials, toxicology studies, and the cost associated with the administration of clinical trials. In addition, the Company is incurring costs, primarily manufacturing costs and clinical trial administration costs, as we prepare for a phase 2b clinical trial of ARC-520, which is anticipated to begin in 2015.

## Revenue

Total revenue was \$170,750 for the three months ended December 31, 2014 and \$43,750 for the three months ended December 31, 2013. Revenue is primarily related to licensed technology in 2013. In addition, the Company had collaboration revenue of \$80,000 and earned \$47,000 in revenue for delivering a materials study during the three months ended December 31, 2014.

## Operating Expenses

The analysis below details the operating expenses and discusses the expenditures of the Company within the major expense categories. Certain reclassifications have been made to prior period operating expense categories to conform to the current period presentation. For purposes of comparison, the amounts for the three months ended December 31, 2014 and 2013 are shown in the tables below.

### Research and Development Expenses – Three months ended December 31, 2014 compared to the three months ended December 31, 2013

R&D expenses are related to the Company's on-going research and development efforts, primarily related to program costs, composed primarily of outsourced costs related to the manufacturing of clinical supplies, toxicity/efficacy studies and clinical trial expenses. Internal costs primarily relate to operations at our research facility in Madison, Wisconsin, including facility costs and laboratory-related expenses. The following table provides details of research and development expense for the periods indicated:

(in thousands, except percentages)

	Three Months Ended	% of Expense	Three Months Ended	% of Expense	Increase (Decrease)	
	December 31, 2014	Category	December 31, 2013	Category	\$	%
Laboratory supplies & services	\$ 493	3%	\$ 389	12%	\$ 104	27%
In vivo studies	60	0%	61	2%	(1)	-2%
Outside labs & contract services	126	1%	122	4%	4	3%
Toxicity/efficacy studies	2,068	12%	520	17%	1,548	298%
Drug manufacturing	9,599	54%	1,229	39%	8,370	681%
Clinical trials	5,064	29%	537	17%	4,527	843%
Consulting	-	0%	47	2%	(47)	-100%
License, royalty & milestones	23	0%	12	0%	11	92%
Facilities and related	206	1%	193	6%	13	7%
Other research expenses	105	0%	23	1%	82	357%
<b>Total</b>	<b>\$ 17,744</b>	<b>100%</b>	<b>\$ 3,133</b>	<b>100%</b>	<b>\$ 14,611</b>	<b>466%</b>

Laboratory supplies and services expense increased by \$104,000 from \$389,000 during the three months ended December 31, 2013 to \$493,000 during the current period. The Company expanded its laboratory facility and increased its R&D headcount during 2014. The increase in laboratory supplies and services is a result of the purchase of additional supplies necessary to support increased efforts in pre-clinical research as the Company supports ongoing clinical efforts and accelerates efforts to identify new clinical candidates.

In vivo studies expense was consistent at \$61,000 during the three months ended December 31, 2013 and \$60,000 during the current period. In vivo expense can vary depending on the stage of preclinical candidates, the nature and amount of testing required and based on the varying costs of different in vivo testing models. The expense in both periods relates to studies related to development of new clinical candidates.

Outside labs and contract services expense was consistent at \$122,000 during the three months ended December 31, 2013 and \$126,000 during the current period. The expense in both periods relates to services provided for oligonucleotide synthesis related to development of new clinical candidates.

Toxicity/efficacy studies expense increased by \$1,548,000 from \$520,000 during the three months ended December 31, 2013 to \$2,068,000 during the current period. This category includes IND-enabling toxicology studies as well as post-IND toxicology studies, such as long-term toxicology studies, and other efficacy studies. The current period expense primarily relates to IND-enabling toxicology studies related to ARC-AAT and studies related to ARC-520 to support our anticipated phase 2b clinical trial.

Drug manufacturing expense increased by \$8,370,000 from \$1,229,000 during the three months ended December 31, 2013 to \$9,599,000 during the current period. The current period expense relates to drug manufacturing to supply toxicology studies for our HBV Phase 2b clinical trial, clinical supplies for the HBV Phase 2b clinical trial, as well as clinical supplies for our clinical trial for ARC-AAT. The Phase 2b clinical trial for HBV will be a much larger study than previous clinical trials, and as such, the Company anticipates increased drug manufacturing expenses in future periods.

Clinical trials expense increased by \$4,527,000 from \$537,000 during the three months ended December 31, 2013 to \$5,064,000 during the current period. The increase is primarily driven by costs incurred in preparation for our anticipated phase 2b clinical trial for ARC-520.

Consulting expense decreased by \$47,000 from \$47,000 during the three months ended December 31, 2013 to \$0 during the current period. The decrease is primarily due to 2013 consulting expenses related to the development of targeting technologies which are no longer being pursued.

License, royalty and milestones expense was consistent at \$12,000 during the three months ended December 31, 2013 and \$23,000 during the current period. The expense in both periods pertains to small monthly royalty expenses. This category also can include milestone payments which can vary from period to period depending on the nature of our various license agreements, and the timing of reaching various development milestones requiring payment.

Facilities expense increased by \$13,000 from \$193,000 during the three months ended December 31, 2013 to \$206,000 during the current period. Facilities expenses were higher in the current period primarily due to the expansion of our R&D facility in Madison during 2014.

Other research expense increased \$82,000 from \$23,000 during the three months ended December 31, 2013 to \$105,000 during the current period. The current period expenses primarily relate to costs associated with a collaboration agreement to identify muscle targeting peptide molecules for which the Company has been reimbursed and recorded that reimbursement as revenue as discussed above.

### **Salaries – Three months ended December 31, 2014 compared to the three months ended December 31, 2013**

The Company employs scientific, technical and administrative staff at its corporate offices and its research facility. Salaries and payroll-related expense consists of salary, bonuses, payroll taxes and related benefits. Salary and payroll-related expenses include two major categories: general and administrative (G&A) compensation expense, and research and development (R&D) compensation expense, based on the primary activities of each employee. The following table provides detail of salary and payroll-related expenses for the periods indicated:

*(in thousands, except percentages)*

	Three months Ended December 31, 2014		% of Expense Category	Three months Ended December 31, 2013		% of Expense Category	Increase (Decrease)	
	\$			\$			\$	%
R&D - compensation-related	\$ 2,366	75%	\$ 1,330	64%	\$ 1,036	78%		
G&A - compensation-related	785	25%	751	36%	34	5%		
Total	\$ 3,151	100%	\$ 2,081	100%	\$ 1,070	51%		

R&D compensation expense increased by \$1,036,000 from \$1,330,000 during the three months ended December 31, 2013 to \$2,366,000 during the current period. Increased headcount accounted for the majority of the change in compensation-related expense.

G&A compensation expense increased by \$34,000 from \$751,000 during the three months ended December 31, 2013 to \$785,000 during the current period. The majority of this increase is due to a small increase in headcount and salary increases.

**General & Administrative Expenses – Three months ended December 31, 2014 compared to the three months ended December 31, 2013**

The following table provides details of our general and administrative expenses for the periods indicated:

(in thousands, except percentages)

	Three Months Ended December 31, 2014		Three Months Ended December 31, 2013		Increase (Decrease)	
	\$	% of Expense Category	\$	% of Expense Category	\$	%
Professional/outside services	1,253	60%	407	45%	846	208%
Patent expense	177	9%	132	14%	45	34%
Facilities and related	76	4%	47	5%	29	62%
Travel	186	9%	100	11%	86	86%
Business insurance	106	5%	55	6%	51	93%
Communication and Technology	154	7%	57	6%	97	170%
Office expenses	79	4%	57	6%	22	39%
Other	55	2%	59	7%	(4)	-7%
<b>Total</b>	<b>\$ 2,086</b>	<b>100%</b>	<b>\$ 914</b>	<b>100%</b>	<b>\$ 1,172</b>	<b>128%</b>

Professional/outside services include legal, accounting, consulting and other outside services retained by the Company. All periods include normally recurring legal and audit expenses related to SEC compliance and other corporate matters. Professional/outside services expense increased by \$846,000 from \$407,000 during the three months ended December 31, 2013 to \$1,253,000 during the current period. The increase in professional fees primarily related to professional recruiting fees for the hiring of additional R&D personnel to support and expand our clinical pipeline. Additionally, the Company incurred higher attorney's fees related to recent litigation events. See Note 6 – Commitments and Contingencies for further discussion.

Patent expense increased by \$45,000 from \$132,000 during the three months ended December 31, 2013 to \$177,000 during the current period. The Company continues to invest in patent protection for its DPC technology, related product candidates and other RNAi technology through patent filings in multiple countries. The Company expects to extend and maintain protection for its current portfolios, as appropriate, and file new patent applications as technologies are developed and improved.

Facilities-related expense increased by \$29,000 from \$47,000 during the three months ended December 31, 2013 to \$76,000 in the current period. Facilities expense increased due to the expansion of our corporate headquarters in Pasadena.

Travel expense increased by \$86,000 from \$100,000 during the three months ended December 31, 2013 to \$186,000 during the current period. Travel expense increased due to travel in support of our R&D function, primarily our GMP manufacturing campaign and our clinical trials.

Business insurance expense increased by \$51,000 from \$55,000 during the three months ended December 31, 2013 to \$106,000 during the current period. Business insurance costs increased primarily related to added coverage related to the Company's clinical trials.

Communication and technology expense increased by \$97,000 from \$57,000 during the three months ended December 31, 2013 to \$154,000 during the current period. The increase was related to the cost associated with new equipment related to new employees as well as upgrades to the Company's networks.

Office expense increased by \$22,000 from \$57,000 during the three months ended December 31, 2013 to \$79,000 during the current period. The increase was related to conferences/training, office supplies, miscellaneous administrative expenses, and expenses related to office expansions at our R&D facility in Madison and our corporate headquarters in Pasadena.

Other expense was consistent at \$59,000 during the three months ended December 31, 2013 and \$55,000 during the current period. This category consists primarily of conference attendance fees, franchise and property tax expenses and marketing expenses.

### **Stock-based compensation expense**

Stock-based compensation expense, a noncash expense, was \$2,015,000 during the three months ended December 31, 2014, compared to \$521,000 during the comparable prior period. Stock-based compensation expense is based upon the valuation of stock options granted to employees, directors, and certain consultants. Many variables affect the amount expensed, including the Company's stock price on the date of the grant, as well as other assumptions. Based on the additional options and restricted stock units granted to new and existing employees in fiscal 2014, compensation expense has increased from the prior year.

### **Depreciation and amortization expense**

Depreciation and amortization expense, a noncash expense, was \$290,000 during the three months ended December 31, 2014, compared to \$403,000 during the comparable prior period. The majority of depreciation and amortization expense relates to depreciation on lab equipment obtained as part of the acquisition of Roche Madison in 2011. In addition, the Company records depreciation on leasehold improvements at its Madison research facility and its Pasadena corporate headquarters.

### **Other income / expense**

Other income / expense was income of \$2,540,000 during the three months ended December 31, 2014, compared to expense of \$3,676,000 in the comparable prior period. The primary component of other expense during each period was a change in the value of derivative liabilities related to certain warrants with a price adjustment feature, necessitating derivative accounting. During 2014, this change resulted in non-cash income of \$2,382,000 whereas in the prior period it resulted in a non-cash expense of \$3,520,000.

### **Liquidity and Cash Resources**

Arrowhead has historically financed its operations through the sale of securities of Arrowhead and its Subsidiaries. Research and development activities have required significant capital investment since the Company's inception, and are expected to continue to require significant cash investment in fiscal 2015 and beyond.

At December 31, 2014, the Company had cash on hand of approximately \$104.0 million as compared to \$132.5 million at September 30, 2014. Excess cash invested in fixed income securities was \$41.3 million at December 31, 2014, compared to \$44.7 million at September 30, 2014. The Company believes its current financial resources are sufficient to fund its operations through at least the next twelve months.

A summary of cash flows for the three months ended December 31, 2014 and 2013 is as follows:

	<b>Three Months Ended December 31, 2014</b>	<b>Three Months Ended December 31, 2013</b>
<b>Cash Flow from Continuing Operations:</b>		
Operating Activities	\$ (24,200,006)	\$ (7,022,332)
Investing Activities	(4,499,671)	(15,145,565)
Financing Activities	180,298	62,766,877
Net Increase (Decrease in Cash)	(28,519,379)	40,598,980
Cash at Beginning of Period	132,510,610	19,114,444
Cash at End of Period	<u>\$ 103,991,231</u>	<u>\$ 59,713,424</u>

During the three months ended December 31, 2014, the Company used \$24.2 million in cash from operating activities, which represents the on-going expenses of its research and development programs and corporate overhead. Cash outlays were primarily composed of the following: research and development costs were \$18.9 million, salary and payroll-related expenses were \$3.2 million, and general and administrative costs were \$2.1 million. Cash used by investing activities was \$4.5 million, primarily related to other investing activities of \$7.0 million and capital expenditures of \$0.6 million, partially offset by maturities on fixed income securities of \$3.1 million. Cash provided by financing activities of \$0.2 million was driven by cash received from the exercise of warrants and stock options.

During the three months ended December 31, 2013, the Company used \$7.0 million in cash from operating activities, which represents the on-going expenses of its research and development programs and corporate overhead. Cash outlays were primarily composed of the following: research and development costs were \$4.0 million, salary and payroll-related expenses were \$2.1 million, and general and administrative costs were \$0.9 million. Cash used by investing activities was \$15.1 million, primarily related to net cash investments in fixed income securities of \$15.0 million. Capital expenditures were \$0.1 million. Cash provided by financing activities of \$62.8 million includes \$62.8 million of cash received from equity financings by the Company during 2013.



## **Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements or relationships.

## **ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

There has been no material change in our exposure to market risk from that described in Item 7A of our Annual Report on Form 10-K for the year ended September 30, 2014, filed with the Securities and Exchange Commission on November 25, 2014.

## **ITEM 4. CONTROLS AND PROCEDURES**

Our Chief Executive Officer and our Chief Financial Officer, after evaluating our “disclosure controls and procedures” (as defined in Rules 13a-15(e) and 15d-15(e)) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) as of the end of the period covered by this Quarterly Report on Form 10-Q (the “Evaluation Date”), have concluded that, as of the Evaluation Date, our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and to ensure that information required to be disclosed by us in such reports is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer where appropriate, to allow timely decisions regarding required disclosure.

No change in the Company’s internal controls over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) of the Exchange Act) occurred during the Company’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**ITEM 1. LEGAL PROCEEDINGS**

From time to time, we may be involved in routine legal proceedings, as well as demands, claims and threatened litigation, which arise in the normal course of our business. We believe there is no litigation pending that could, individually or in the aggregate, have a material adverse effect on our results of operations or financial condition. The information contained in Note 6 to the Consolidated Financial Statements under the heading “Litigation” in Part I, Item 1 is incorporated herein by reference.

**ITEM 1A. Risk Factors**

There have been no material changes to the risk factors included in our Annual Report on Form 10-K for the year ended September 30, 2014. Please carefully consider the information set forth in this Quarterly Report on Form 10-Q and the risk factors discussed in Part I, “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended September 30, 2014, which could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K, as well as other risks and uncertainties, could materially and adversely affect our business, results of operations and financial condition, which in turn could materially and adversely affect the trading price of shares of our Common Stock. Additional risks not currently known or currently material to us may also harm our business.

**ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**

None.

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

None.

**ITEM 4. MINE SAFETY DISCLOSURES**

Not Applicable.

**ITEM 5. OTHER INFORMATION**

None.

**ITEM 6. EXHIBITS**

<b>Exhibit Number</b>	<b>Document Description</b>
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**
101	The following materials from Registrant's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, formatted in XBRL (Extensible Business Reporting Language): (1) Consolidated Balance Sheets, (2) Consolidated Statements of Operations, (3) Consolidated Statement of Stockholders' Equity, (4) Consolidated Statements of Cash Flows, and (5) Notes to Consolidated Financial Statements. **

\* Filed herewith

\*\* Furnished herewith

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: February 9, 2015

ARROWHEAD RESEARCH CORPORATION

By: /s/ Kenneth A. Myszowski

Kenneth A. Myszowski  
Chief Financial Officer

## CERTIFICATION PURSUANT SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Christopher Anzalone, Chief Executive Officer of Arrowhead Research Corporation, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arrowhead Research Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 9, 2015

/s/ CHRISTOPHER ANZALONE

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**Christopher Anzalone**  
**Chief Executive Officer**

## CERTIFICATION PURSUANT SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Kenneth A. Myszkowski, Chief Financial Officer of Arrowhead Research Corporation, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arrowhead Research Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 9, 2015

/s/ Kenneth A. Myszkowski

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**Kenneth A. Myszkowski,**  
**Chief Financial Officer**

**CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Christopher Anzalone, Chief Executive Officer of Arrowhead Research Corporation (the "Company"), certify, pursuant to Rule 13(a)-14(b) or Rule 15(d)-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that (i) the Quarterly Report on Form 10-Q of the Company for the quarterly period ended December 31, 2014, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: February 9, 2015

/s/ CHRISTOPHER ANZALONE

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**Christopher Anzalone**  
**Chief Executive Officer**

A signed original of these written statements required by 18 U.S.C. Section 1350 has been provided to Arrowhead Research Corporation and will be retained by Arrowhead Research Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

## CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Kenneth A. Myszkowski, Chief Financial Officer of Arrowhead Research Corporation (the "Company"), certify, pursuant to Rule 13(a)-14(b) or Rule 15(d)-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that (i) the Quarterly Report on Form 10-Q of the Company for the quarterly period ended December 31, 2014, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: February 9, 2015

/s/ Kenneth A. Myszkowski

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**Kenneth A. Myszkowski**  
**Chief Financial Officer**

A signed original of these written statements required by 18 U.S.C. Section 1350 has been provided to Arrowhead Research Corporation and will be retained by Arrowhead Research Corporation and furnished to the Securities and Exchange Commission or its staff upon request.