ARROWHEAD RESEARCH CORP
Form 10-Q
August 12, 2014

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-Q

(Mark One)

x QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 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	46-0408024
(State of incorporation)	(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 x 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 x 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	¨	Accelerated filer	¨
Non-accelerated filer	¨ (Do not check if a smaller reporting company)	Smaller reporting company	x

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

The number of shares of the registrant’s common stock outstanding as of August 11, 2014 was 52,908,567.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Arrowhead Research Corporation and Subsidiaries

Consolidated Balance Sheets

	(Unaudited) June 30, 2014	September 30, 2013
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$138,349,733	$19,114,444
Trade receivable	-	75,000
Prepaid expenses	700,063	532,354
Other current assets	538,742	91,660
Short term investments	23,834,408	9,030,261
TOTAL CURRENT ASSETS	163,422,946	28,843,719
Property and equipment, net	3,674,131	3,513,235
Patents and other intangible assets, net	3,199,523	3,240,513
Investments	26,284,862	1,702,153
Other assets	41,414	30,011
TOTAL ASSETS	$196,622,876	$37,329,631
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	$2,158,133	$1,199,632
Accrued expenses	1,068,667	638,884
Accrued payroll and benefits	611,092	905,771
Deferred revenue	71,875	103,125
Derivative liabilities	4,018,719	4,096,363
Capital lease obligation	213,110	221,345
Notes payable	50,000	971,557
Other current liabilities	58,500	588,343
TOTAL CURRENT LIABILITIES	8,250,096	8,725,020
LONG-TERM LIABILITIES		
Notes payable, net of current portion	-	50,000
Capital lease obligation, net of current portion	812,169	1,061,113
Other non-current liabilities	1,752,822	1,758,709
TOTAL LONG-TERM LIABILITIES	2,564,991	2,869,822
Commitments and contingencies		
STOCKHOLDERS' EQUITY		
Arrowhead Research Corporation stockholders' equity:		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; 21,291 and 9,900 shares		
issued and outstanding as of June 30, 2014 and September 30, 2013, respectively	21	10
	145,278	124,859

Common stock, $0.001 par value; 145,000,000 shares authorized; 52,908,567 and 32,489,444 shares issued and outstanding as of June 30, 2014 and September 30, 2013, respectively		
Additional paid-in capital	388,558,305	193,514,766
Accumulated deficit	(202,340,717)	(166,140,969)
Total Arrowhead Research Corporation stockholders' equity	186,362,887	27,498,666
Non-controlling interest	(555,098)	(1,763,877)
TOTAL STOCKHOLDERS’ EQUITY	185,807,789	25,734,789
TOTAL LIABILITIES AND STOCKHOLDERS’ EQUITY	$196,622,876	$37,329,631

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

Arrowhead Research Corporation and Subsidiaries

Consolidated Statements of Operations

(unaudited)

	Three Months ended June 30, 2014	Three Months ended June 30, 2013	Nine Months ended June 30, 2014	Nine Months ended June 30, 2013
REVENUE	$43,750	$43,750	$131,250	$246,516
OPERATING EXPENSES				
Salaries and payroll-related costs	2,454,449	1,651,729	7,634,142	5,006,328
General and administrative expenses	1,582,465	899,633	3,865,845	2,597,279
Research and development	6,392,200	1,756,527	14,719,739	5,458,212
Stock-based compensation	2,038,682	363,593	3,758,264	1,114,375
Depreciation and amortization	276,054	454,086	1,075,238	1,352,448
Impairment expense	-	1,308,047	-	1,308,047
TOTAL OPERATING EXPENSES	12,743,850	6,433,615	31,053,228	16,836,689
OPERATING LOSS	(12,700,100)	(6,389,865)	(30,921,978)	(16,590,173)
OTHER INCOME (EXPENSE)				
Equity in income (loss) of unconsolidated affiliates	78,702	(159,530)	(69,350)	(380,699)
Gain (loss) on sale of fixed assets, net	-	(39,949)	(58,878)	(76,388)
Interest income (expense), net	226,424	(48,252)	386,392	(68,403)
Change in value of derivatives	758,469	200,747	(5,712,335)	215,620
Other income (expense)	10,054	259,221	81,269	(997,976)
TOTAL OTHER INCOME (EXPENSE)	1,073,649	212,237	(5,372,902)	(1,307,846)
LOSS FROM CONTINUING OPERATIONS BEFORE INCOME TAXES	(11,626,451)	(6,177,628)	(36,294,880)	(17,898,019)
Provision for income taxes	-	-	-	-
LOSS FROM CONTINUING OPERATIONS	(11,626,451)	(6,177,628)	(36,294,880)	(17,898,019)
Income (loss) from discontinued operations	-	-	-	(354)
NET INCOME (LOSS) FROM DISCONTINUED OPERATIONS	-	-	-	(354)
NET LOSS	(11,626,451)	(6,177,628)	(36,294,880)	(17,898,373)
Net (gain) loss attributable to non-controlling interests	(2,468)	98,618	95,132	447,268
NET LOSS ATTRIBUTABLE TO ARROWHEAD	$(11,628,919)	$(6,079,010)	$(36,199,748)	$(17,451,105)
NET LOSS PER SHARE ATTRIBUTABLE TO ARROWHEAD	$(0.22)	$(0.23)	$(0.81)	$(0.92)
SHAREHOLDERS - BASIC & DILUTED:				
Weighted average shares outstanding - basic and diluted	51,931,989	26,134,183	44,565,008	18,893,197

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

Arrowhead Research Corporation and Subsidiaries

Consolidated Statement of Stockholders' Equity

(unaudited)

	Common Stock		Preferred Stock		Additional Paid-in Capital	Accumulated Deficit	Non-controlling interest	Totals
	Shares	Amount	Shares	Amount				
Balance at September 30, 2013	32,489,444	$124,859	9,900	$10	193,514,766	$(166,140,969)	$(1,763,877)	$25,734,789
Exercise of warrants	2,875,727	2,875	-	-	10,001,918	-	-	10,004,793
Exercise of stock options	377,112	377	-	-	2,368,885	-	-	2,369,262
Stock-based compensation	-	-	-	-	3,758,264	-	-	3,758,264
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	-	-	-	-	5,789,979	-	-	5,789,979
Preferred stock converted to common stock	7,638,033	7,638	(34,609)	(35)	(7,603)	-	-	-
Deconsolidation of Calando Pharmaceuticals, Inc.	-	-	-	-	-	-	1,303,911	1,303,911
Net loss for the nine months ended June 30, 2014	-	-	-	-	-	(36,199,748)	(95,132)	(36,294,880)
Balance at June 30, 2014	52,908,567	$145,278	21,291	$21	$388,558,305	$(202,340,717)	$(555,098)	$185,807,789

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

Arrowhead Research Corporation and Subsidiaries

Consolidated Statements of Cash Flows

(unaudited)

	Nine months ended June 30, 2014	Nine months ended June 30, 2013
CASH FLOWS FROM OPERATING ACTIVITIES OF CONTINUING OPERATIONS:		
Net loss	$(36,294,880)	$(17,898,373)
Net (income) loss attributable to non-controlling interests	95,132	447,268
Net income (loss) attributable to Arrowhead	(36,199,748)	(17,451,105)
(Income) loss from discontinued operations	-	354
(Gain) loss on disposal of fixed assets	58,878	76,388
Change in value of derivatives	5,712,335	(215,620)
Stock-based compensation	3,758,264	1,114,375
Depreciation and amortization	1,075,238	1,352,448
Amortization (accretion) of note discounts, net	416,292	82,341
Non-cash gain in equity investment	(87,197)	-
Non-cash impairment expense	-	2,315,721
Non-controlling interest	(95,132)	(447,268)
Changes in operating assets and liabilities:		
Receivables	75,000	9,375
Other receivables	(517,986)	1,080
Prepaid expenses	(127,248)	(441,373)
Other assets	(11,402)	(1,813)
Accounts payable	990,929	183,959
Accrued expenses	459,690	95,132
Other liabilities	(4,480)	(313,354)
NET CASH USED IN OPERATING ACTIVITIES OF CONTINUING OPERATIONS	(24,496,567)	(13,639,360)
CASH FLOWS FROM INVESTING ACTIVITIES OF CONTINUING OPERATIONS:		
Purchases of property and equipment	(1,251,987)	(191,656)
Proceeds from sale of fixed assets	-	89,505
Purchase of marketable securities	(46,365,528)	(4,058,003)
Proceeds from sale of marketable securities	6,590,824	1,160,181
NET CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES OF CONTINUING OPERATIONS	(41,026,691)	(2,999,973)
CASH FLOWS FROM FINANCING ACTIVITIES OF CONTINUING OPERATIONS:		
Principal payments on capital leases	(257,178)	(160,495)
Proceeds from issuance of common stock and preferred stock, net	172,641,720	42,448,824
Proceeds from the exercise of warrants and stock options	12,374,005	-

NET CASH PROVIDED BY FINANCING ACTIVITIES OF CONTINUING OPERATIONS	184,758,547	42,288,329
Cash flows from discontinued operations:		
Operating cash flows	-	(354)
Investing cash flows	-	-
Financing cash flows	-	-
Net cash provided by (used in) discontinued operations:	-	(354)
NET INCREASE IN CASH	119,235,289	25,648,642
CASH AT BEGINNING OF PERIOD	19,114,444	3,377,288
CASH AT END OF PERIOD	$138,349,733	$29,025,930
Supplementary disclosures:		
Interest paid	$21,478	$32,139

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

SUPPLEMENTARY NON CASH TRANSACTIONS

On February 18, 2014, Arrowhead issued 131,579 shares of Common Stock valued at $500,000 to Galloway Limited, in settlement of a services agreement dated September 30, 2011.

On October 21, 2012, Arrowhead issued 239,894 shares of Common Stock to Roche in accordance with the terms of the Stock and Asset Purchase Agreement for Roche Madison Inc., to settle a liability of $986,049, which the Company had recorded upon the acquisition.

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”), Ablaris Therapeutics, Inc. (“Ablaris”), and Tego Biosciences Corporation (“Tego”), as well as our former subsidiaries, Alvos Therapeutics, Inc. (“Alvos”) and Agonn Systems, Inc. (“Agonn”),which were merged into Arrowhead during 2013, and Calando Pharmaceuticals, Inc. (“Calando”), which was deconsolidated as of June 30, 2014, (4) the term “Minority Investments” refers collectively to Nanotope, Inc. (“Nanotope”), which was dissolved during 2013, and Leonardo Biosystems, Inc. (“Leonardo”) in which the company holds a less than majority ownership position, (5) the term “Common Stock” refers to Arrowhead’s Common Stock, (6) 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 is a biopharmaceutical company developing targeted RNAi therapeutics. The Company is leveraging its proprietary Dynamic Polyconjugate (DPC) delivery platform to develop targeted drugs based on the RNA interference mechanism that efficiently silences disease-causing genes. Arrowhead’s pipeline includes ARC-520 for chronic hepatitis B virus, ARC-AAT for liver disease associated with Alpha-1 antitrypsin deficiency, and partner-based programs in obesity and oncology.

Liquidity

Historically, the Company’s primary source of financing has been through the sale of equity securities. Research and development activities have required significant capital investment since the Company’s inception and the Company expects its operations to continue to require cash investment in fiscal 2014 and beyond as the Company advances its research and development efforts, including clinical trials, and related drug manufacturing costs.

At June 30, 2014, the Company had $138.3 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 27 months. These bonds provide a source of liquidity, though the Company plans to hold them until maturity. At June 30, 2014, the Company had invested $50.1 million in bonds. During the nine months ended June 30, 2014, the Company’s cash position increased by $119.2 million, which was the result of the receipt of cash from the issuance of equity of $172.6 million and cash from the exercise of warrants and options of $12.4 million, partially offset by net cash invested in fixed income investments of $39.8 million, cash outflows of $24.5 million related to continuing operating activities and capital expenditures of $1.3 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 facilities are located. All significant intercompany accounts and transactions are eliminated in consolidation, and non-controlling interests are accounted for in the Company's financial statements.

Basis of Presentation—The accompanying unaudited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial information and in accordance with the instructions to Form 10-Q and Article 8 of Regulation S-X. Accordingly, the financial statements do not include all of the information and notes required by GAAP for complete financial statements. In the opinion of management, all adjustments, including normal recurring accruals, considered necessary for a fair presentation have been included. Interim results are not necessarily indicative of results for a full year. The September 30, 2013 Consolidated Balance Sheet was derived from audited financial statements, but does not include all disclosures required by GAAP. This financial information should be read in conjunction with the consolidated financial statements and notes included in the Company's Annual Report on Form 10-K for the year ended September 30, 2013. Certain reclassifications have been made to prior period financial statements to conform to the current period presentation.

Use of Estimates—The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the accompanying financial statements. Actual results could differ from those estimates.

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 June 30, 2014 and September 30, 2013.

Concentration of Credit Risk—The Company maintains several checking 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 invests 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 June 30, 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. See further information regarding the Company's short and long term investments in Note 2 – Investments.

See further information regarding fair market value of marketable debt securities in Note 10 – Fair Value Measurements, such fair market data is obtained from independent pricing services.

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—Intangible assets subject to amortization included certain license agreements acquired through business combinations. 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 Arrowhead 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 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 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.

Minority Equity Investments—The Company had a minority equity investment in Leonardo, a privately held biotechnology company. Based on the status of the development of Leonardo's program, this investment has been fully impaired and the net book value at June 30, 2014 is $0. The operations of Leonardo ceased in December 2013.

Non-controlling Interests in Majority-Owned Subsidiaries—Operating losses applicable to majority-owned Calando, Ablaris and, prior to its disposal, Unidym have periodically exceeded the non-controlling interests in the equity capital of either Subsidiary. Such excess losses applicable to the non-controlling interests have been and are borne by the Company as there is no obligation of the non-controlling interests to fund any losses in excess of their original investment. There is also no obligation or commitment on the part of the Company to fund operating losses of any Subsidiary whether wholly-owned or majority-owned. The Company allocates the non-controlling interests' share of net loss in excess of the non-controlling interests' initial investment in accordance with FASB ASC 810-10.

When there is a change in the Company's proportionate ownership share of a development-stage Subsidiary resulting from additional equity transactions in the Subsidiary, the change is accounted for as an equity transaction in consolidation. To the extent that the increase in the calculated value of the Company's interest in the equity of the Subsidiary exceeds the Company's investment in the transaction, that increase in value is referred to as the Company's "increase in its proportionate share of the Subsidiary's equity" and the amount is recorded as an increase in the Company's Additional Paid-in Capital.

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 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.

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 issued to employees and consultants and warrants to purchase Common Stock of the Company.

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.

Recently Issued Accounting Standards

In June 2014, the FASB issued ASU 2014-10, Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance, which eliminates the distinction and separate requirements for development stage entities and other reporting entities under U.S. GAAP. Specifically the amendment eliminates the requirement for development stage entities to 1) present inception-to-date information in the statements of income, cash flow and shareholders' equity, 2) label the financial statements as those of a development stage entity, 3) disclose a description of the development stage activities in which the entity is engaged and 4) disclose the first year in which the entity is no longer a development stage entity that in prior years it had been in the development stage. ASU 2014-10 is effective for fiscal years beginning after December 15, 2014 with early adoption permitted. The Company has adopted ASU 2014-10 effectively with the filing of this Form 10-Q.

In May 2014, the FASB issued ASU No. 2014-09 Revenue from Contracts with Customers (Topic 606), which will supersede nearly all existing revenue recognition guidance under GAAP. ASU No. 2014-09 provides that an entity recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This update also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments, and assets recognized from costs incurred to obtain or fulfill a contract. ASU No. 2014-09 allows for either full retrospective or modified retrospective adoption and will become effective for the Company in the first quarter of 2018. The Company is evaluating the potential effects of the adoption of this update on its financial statements.

In July 2013, the FASB issued ASU 2013-11, Income Taxes (Topic 740): Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists, which eliminates diversity in practice for the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss or a tax credit carryforward is available to reduce the taxable income or tax payable that would result from disallowance of a tax position. ASU 2013-11 affects only the presentation of such amounts in an entity's balance sheet and is effective for fiscal years beginning after December 15, 2013 and interim periods within those years. Early adoption is permitted. The Company is evaluating the impact, if any, of the adoption of ASU 2013-11 on its Consolidated Balance Sheet.

NOTE 2. INVESTMENTS

The Company invests its excess cash balances in short-term and long-term debt securities. Investments at June 30, 2014 consisted of corporate bonds with maturities remaining of less than three 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 June 30, 2014, all investments were classified as held-to-maturity securities.

The following tables summarize the Company's short and long-term investments as of June 30, 2014, and September 30, 2013.

	As of June 30, 2014			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Commercial notes (due within one year)	$23,834,408	$ 1,850	$ (237,181)	$23,599,077
Commercial notes (due after one year within three years)	26,284,862	3,899	(152,222)	26,136,599
Total	$50,119,270	$ 5,749	$ (389,403)	$49,735,616

	As of September 30, 2013			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Commercial notes (due within one year)	$9,030,261	$ 7,500	$ (39,281)	$8,998,480
Commercial notes (due after one year within three years)	1,702,153	—	(2,362)	1,699,791
Total	$10,732,414	$ 7,500	$ (41,643)	$10,698,271

NOTE 3. FIXED ASSETS

Property, equipment and other fixed assets 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.

	Balance as of June 30, 2014	September 30, 2013
Computers, office equipment and furniture	$334,162	$323,376
Research equipment	4,248,606	3,452,013
Software	69,623	69,623
Leasehold improvements	2,955,217	2,749,409
Total gross fixed assets	7,607,608	6,594,421
Less: Accumulated depreciation and amortization	(3,933,477)	(3,081,186)
Property and equipment, net	$3,674,131	$3,513,235

NOTE 4. ACQUISITIONS

Roche Madison

On October 21, 2011, the Company entered into a Stock and Asset Purchase Agreement (the “RNAi Purchase Agreement”) with Hoffmann-La Roche Inc. and F Hoffmann-La Roche Ltd (collectively, “Roche”), pursuant to which the Company purchased from Roche (i) all of the outstanding common stock of Roche Madison Inc. (“Roche Madison”, now “Arrowhead Madison”) and (ii) the intellectual property rights then held by Roche related to its RNAi business and identified in the RNAi Purchase Agreement (the “Transaction”). In consideration for the purchase of Roche Madison and the Roche RNAi assets, the Company issued to Roche a promissory note with a principal value of $50,000 and 1,288,158 shares of Common Stock.

Pursuant to the RNAi Purchase Agreement, Roche has a right of first negotiation on certain product candidates developed by the Company and its affiliates relating to the purchased assets. If the Company proposes to out-license or enters into substantive negotiations to out-license, any Clinical Candidate or Existing Candidate (as such terms are defined in the RNAi Purchase Agreement), the Company must give notice of the Candidate it proposes to out-license and negotiate exclusively and in good faith with Roche for 90 days regarding the applicable out-license. This right of first negotiation applies to all Existing Candidates (as defined in the RNAi Purchase Agreement) and the first five Clinical Candidates for which the Company delivers notice to Roche and subsequently enters into an out-license.

In addition to the consideration paid by the Company as per the closing terms, the Company is obligated to make certain royalty and milestone payments to Roche upon the occurrence of certain events. For certain product candidates that are developed by the Company that are covered by a valid claim by the patent rights transferred in the Transaction for which the Company and Roche do not enter into a licensing arrangement, the Company will be obligated to pay a 3% royalty on Net Sales (as defined in the RNAi Purchase Agreement), provided that the royalty rate may be reduced or offset in certain circumstances. The obligation to pay royalties on such candidates will last until the later of (i) the expiration of the last to expire patent right related to such product candidate that was transferred in the Transaction and (ii) ten years after the first commercial sale of such product candidate.

The Company will also be obligated to make cash payments to Roche upon the achievement of various milestones for certain clinical candidates, for which the Company and Roche do not enter into a licensing arrangement, including the first regulatory approval in certain jurisdictions, and upon certain annual sales milestones for candidates that receive regulatory approval. The potential payments range from $2,500,000 to $6,000,000 per milestone. At the time of acquisition, the Company’s estimate of future payments for potential royalties and milestones had a net present value of $84,935 which was recorded as contingent consideration as a part of other non-current liabilities. Contingent consideration is calculated by modeling research and development activities for clinical candidates, forecasting timelines to market, and using “peak sales” estimate modeling, cash flows and potential milestone and royalty payments are calculated. The modeling assumes certain success rates, and discount factors related to riskiness of projects and the time value of money to calculate a net present value of future consideration payments to Roche. These estimates are based on many unknown variables that are difficult to estimate, and due to the extended process of drug development prior to marketing of drug candidates, the models must extend many years into the future. Such predictions are inherently uncertain. On a quarterly basis, the Company re-evaluates its contingent consideration, and if material, makes adjustments to the recorded liability. Any adjustment to the contingent consideration liability is reflected in the Company’s Statement of Operations. During fiscal 2013, the contingent consideration liability was increased by $1.4 million, which is recorded as a part of other non-current liabilities on the Company’s Consolidated Balance Sheet. There have been no changes to the liability during the nine months ended June 30, 2014. For additional information related to our valuation of this obligation, see Note 10, Fair Value Measurements.

NOTE 5. INTANGIBLE ASSETS

Intangible assets consist of in-process research and development (“IPR&D”) not subject to amortization, and other intangible assets 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, we 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 we would record an impairment loss.

Intangible assets subject to amortization include patents capitalized as part of a business combination as well as 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 $147,800. Patents have been amortized over a period of three years to twenty years, however the patent assets were fully impaired as of September 30, 2013. Amortization expense for the three and nine months ended June 30, 2014 was approximately $13,663 and $40,990, respectively. Amortization expense for the three and nine months ended June 30, 2013 was approximately $74,115 and $222,345, respectively. Amortization of license agreements is expected to be approximately $14,000 for the remainder of fiscal year 2014, $55,000 in 2015, $14,000 in 2016, and zero thereafter.

We review amounts capitalized as IPR&D for impairment at least annually in the fourth quarter, and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. In the event the carrying value of the assets is not expected to be recovered, the assets are written down to their estimated fair values. We continue to test our indefinite-lived IPR&D assets for potential impairment until the projects are completed or abandoned.

The following table provides details on our intangible asset balances:

	Intangible assets not subject to amortization	Intangible assets subject to amortization	Total Intangible assets
Balance at September 30, 2012	$ 3,117,322	$ 1,667,247	$ 4,784,569
Impairment	-	(1,308,047)	(1,308,047)
Amortization	-	(236,009)	(236,009)
Balance at September 30, 2013	$ 3,117,322	$ 123,191	$ 3,240,513
Amortization	-	(40,990)	(40,990)
Balance at June 30, 2014	$ 3,117,322	$ 82,201	$ 3,199,523

NOTE 6. INVESTMENT IN SUBSIDIARIES

In addition to 100% ownership interest in Arrowhead Madison Inc., Arrowhead also maintains majority ownership in Calando Pharmaceuticals, Ablaris Therapeutics, Inc., and a minority investment in Leonardo Biosystems, Inc.

Calando Pharmaceuticals, Inc.

Calando is a developer of polymer delivery systems for siRNA and small molecule based therapeutics. Calando's current cash resources preclude additional development of its platform technology and therapeutic candidates. Arrowhead has determined that it will not provide substantial further investment to Calando based on Arrowhead evaluation of Calando's development and business prospects and Calando has been unsuccessful in its efforts to obtain capital from other sources. Calando has ceased operations and terminated its technology license with the California Institute of Technology on which its siRNA therapeutic development efforts were based. Further, pursuant to an involuntary petition by an unpaid Noteholder, Calando is undergoing Chapter 7 bankruptcy proceedings.

In 2009, Calando outlicensed its small molecule program to Cerulean Pharma, Inc., a Boston, MA-based biotech company which has continued the development of the program. Under the license, as the development program progresses, Calando could collect partnership, milestone and royalty payments from Cerulean.

Calando has an outstanding promissory note with a balance of principal and interest totaling $1,253,000 as of June 30, 2014. The promissory note became due on November 26, 2013, but was not repaid due to lack of cash resources at Calando. The holder of the Note initiated an involuntary petition of bankruptcy against Calando. A trustee has been appointed and a meeting of Calando creditors has occurred. It is expected that the trustee will dispose of Calando assets, primarily its license agreement with Cerulean. The Company cannot estimate the proceeds from the disposition of Calando's assets, nor how it will be distributed amongst its various creditors, which includes Arrowhead and the holder of the Note. During the nine months ended June 30, 2014, Arrowhead deconsolidated Calando based on the fact that Calando is now subject to the control of the bankruptcy trustee. The deconsolidation of Calando resulted in an approximately $87,000 gain to the Company's Consolidated Statement of Operations.

As of June 30, 2014, Calando owed to Arrowhead $4.5 million under a series of 8% simple interest notes and advances. It is unlikely these notes will be repaid in full. The balance of the notes and advances has been fully reserved.

As of June 30, 2014, Arrowhead owned 79% of the outstanding shares of Calando and 76% on a fully diluted basis. As a result of the ongoing bankruptcy proceeding for Calando, we do not expect our equity ownership to result

in any return of capital as part of the liquidation of Calando.

Ablaris Therapeutics, Inc.

Ablaris was formed and began operations in fiscal 2011, based on the license of certain anti-obesity technology developed at the MD Anderson Cancer Center at the University of Texas. During fiscal 2011, Ablaris raised $2.9 million in cash, of which $1.3 million was invested by Arrowhead and $1.6 million was invested by outside investors, through the issuance of Ablaris Series A Preferred stock.

As of June 30, 2014, Arrowhead owned 64% of the outstanding shares of Ablaris and 64% on a fully diluted basis.

Leonardo Biosystems, Inc.

Leonardo, a privately-held drug-delivery company in which Arrowhead has a 3% ownership interest, ceased operations in December 2013. Arrowhead’s investment in Leonardo and its receivable from Leonardo have been fully reserved.

NOTE 7. STOCKHOLDERS' EQUITY

At June 30, 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, and 5,000,000 shares of Preferred Stock, par value $0.001.

At June 30, 2014, 52,908,567 shares of Common Stock were outstanding. Additionally, 21,291 shares of Preferred Stock were outstanding, including 5,291 shares of Series B Preferred Stock, convertible into 2,891,257 shares of Common Stock, and 16,000 shares of Series C Preferred Stock, convertible into 2,730,375 shares of Common Stock, (collectively, the "Outstanding Preferred Stock"). At June 30, 2014, 7,182,925 shares were reserved for issuance upon vesting of restricted stock units and exercise of stock options granted under Arrowhead's 2000 Stock Option Plan, 2004 Equity Incentive Plan, and 2013 Incentive Plan, as well as for inducement grants made to new employees.

The Outstanding Preferred Stock is convertible to Common Stock by each holder at its stated conversion price, subject to a 9.99% beneficial ownership limit for each holder. The holders of Outstanding 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 Outstanding Preferred Stock does not carry a coupon, but is entitled to receive dividends on a pari passu basis with the Common Stock, when and if declared. In any liquidation or dissolution of the Company, the holders of Outstanding 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 20, 2011, the Company and Lincoln Park Capital Fund, LLC, an Illinois limited liability company ("LPC") entered into a $15 million purchase agreement (the "Purchase Agreement"), whereby LPC agreed to purchase up to $15 million of Common Stock, subject to certain limitations, from time to time during the three-year term of the Purchase Agreement. The Company has the right, in its sole discretion, over a 36-month period to sell up to $15 million of Common Stock (subject to certain limitations) to LPC, depending on certain conditions as set forth in the Purchase Agreement. As of June 30, 2014, the Company had drawn $1 million from the facility.

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 Convertible Preferred Stock (the "Preferred Shares"), 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 Shares and Preferred Shares 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 expense.

The following table summarizes information about warrants outstanding at June 30, 2014:

Exercise prices	Number of Warrants	Remaining Life in Years
$ 70.60	94,897	2.9
$ 5.00	416,225	1.2
$ 5.09	291,204	0.4

$ 1.38	24,324	1.5
$ 4.16	1,000	2.5
$ 3.25	334,347	2.1
$ 2.12	75,000	3.5
$ 1.83	289,784	3.5
Total warrants outstanding	1,526,781	

NOTE 8. 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. It is expected the new space will be available in September 2014. The leases for the expansion space and the current space will expire in August 2019. Rental costs, including the expansion space are approximately $22,000 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. Including monthly payments recorded under a capital lease of approximately $19,000, total monthly costs are approximately $75,000 per month.

Facility and equipment rent expense, related to continuing operations, for the three and nine months ended June 30, 2014 was $138,000 and $403,000, respectively. Facility and equipment rent expense, related to continuing operations, for the three and nine months ended June 30, 2013 was $126,000 and $407,000, respectively.

As of June 30, 2014, future minimum lease payments due in fiscal years under capitalized leases are as follows:

2014 (remainder of)	$57,105
2015	228,420
2016	228,420
2017	228,420
2018	228,420
2019 and thereafter	95,175
Less interest	(40,681)
Principal	1,025,279
Less current portion	(213,110)
Noncurrent portion	$812,169

As of June 30, 2014, future minimum lease payments due in fiscal years under operating leases are as follows:

2014 (remainder of)	$134,164
2015	580,626
2016	597,196
2017	613,984
2018	638,217
2019 and thereafter	432,861
Total	$2,997,048

NOTE 9. STOCK-BASED COMPENSATION

Arrowhead has three plans that provide for equity-based compensation. Under the 2000 Stock Option Plan, 38,000 shares of Arrowhead's Common Stock are reserved for issuance upon exercise of non-qualified stock options. No further grants can be made under the 2000 Stock Option Plan. The 2004 Equity Incentive Plan reserves 2,734,840 shares for the grant of stock options, stock appreciation rights, restricted stock awards and performance unit/share awards to employees, consultants and others. The 2013 Incentive Plan reserves 4,000,000 shares for the grant of stock options, stock appreciation rights, restricted stock awards and performance awards to employees, consultant and others. As of June 30, 2014, there were options granted and outstanding to purchase 38,000, 2,638,652 and 736,875 shares of Common Stock under the 2000 Stock Option Plan, the 2004 Equity Incentive Plan and the 2013 Incentive Plan, respectively. Also, as of June 30, 2014, there were 410,085 shares reserved for options issued outside of equity compensation plans as inducement grants to new employees. During the nine months ended June 30, 2014, no options were granted under the 2004 Equity Incentive Plan, 765,000 were issued under the 2013 Incentive Plan and 165,000 options were granted outside of equity incentive plans as inducement stock options to new employees.

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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, 2012	1,910,794	$ 6.10		
Granted	1,509,166	$ 2.03		
Cancelled	—	$ —		
Exercised	(675)	$ 3.93		
Balance At September 30, 2013	3,419,285	$ 4.68		
Granted	930,000	$ 14.05		
Cancelled	(148,561)	$ 5.88		
Exercised	(377,112)	$ 6.28		
Balance At June 30, 2014	3,823,612	$ 6.75	8.3 years	$30,271,011
Exercisable At June 30, 2014	1,532,180	$ 5.80	7.3 years	$13,666,712

Stock-based compensation expense for the three and nine months ended June 30, 2014 was $1,070,631 and $2,186,653, respectively. Stock-based compensation expense for the three and nine months ended June 30, 2013 was $363,593 and $1,114,375, respectively. There is no income tax benefit as the Company is currently operating at a loss and an actual income tax benefit may not be realized. The loss creates a timing difference, resulting in a deferred tax asset, which is fully reserved by a valuation allowance.

The aggregate grant date fair value of the options granted by the Company during the three and nine months ended June 30, 2014 is estimated at $1,176,000 and $8,295,600, respectively. The aggregate grant date fair value of the options granted by the Company during the three and nine months ended June 30, 2013 is estimated at $1,094,295 and $1,197,588, respectively.

The intrinsic value of the options exercised during the three and nine months ended June 30, 2014 was $371,334 and $3,606,061, respectively. No options were exercised during the three and nine months ended June 30, 2013.

As of June 30, 2014, the pre-tax compensation expense for all unvested stock options in the amount of approximately $10,514,619 will be recognized in the Company’s results of operations over a weighted average period of 3.2 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 the Company’s 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:

	Nine months ended June 30,	
	2014	2013
Dividend yield	—	—
Risk-free interest rate	1.8% to 2.5%	0.7% to 1.3%
Volatility	69%	69%
Expected life (in years)	6.25 to 9.72	5.5 to 6.25
Weighted average grant date fair value per share of options granted	$8.92	$1.26

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) are granted under the Company's 2013 Incentive Plan. During the nine months ended June 30, 2014, the Company issued 470,000 restricted stock units to certain members of management and certain members of its Board of Directors. At vesting each RSU will be exchanged for one share of the Company's Common Stock. The RSUs issued to management vest in equal installments on the one and two year anniversary of the date of grant. The RSUs issued to the members of the Board of Directors vest upon the one year anniversary of the date of grant.

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

	Number of RSUs	Weighted-Average Grant Date Fair Value
Unvested at September 30, 2013	-	$ -
Granted	470,000	14.54
Vested	-	-
Forfeited	-	-
Unvested at June 30, 2014	470,000	$ 14.54

The Company recorded $968,051 and $1,571,611 of expense relating to restricted stock units during the three and nine months ended June 30, 2014 respectively, and such expense is included in stock-based compensation expense. There was no expense relating to restricted stock units during the three and nine months ended June 30, 2013.

As of June 30, 2014, the pre-tax compensation expense for all unvested restricted stock units in the amount of approximately $5,291,302 will be recognized in the Company's results of operations over a weighted average period of 1.5 years.

NOTE 10. 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 June 30, 2014 and September 30, 2013 for assets and liabilities measured at fair value on a recurring basis:

June 30, 2014:

	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	$138,349,733	$ —	$—	$138,349,733
Derivative assets	$—	$ —	$—	$—
Derivative liabilities	$—	$ —	$4,018,719	$4,018,719
Contingent consideration obligations related to acquisitions	$—	$ —	$1,595,273	$1,595,273

September 30, 2013:

	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	$19,114,444	$ —	$—	$19,114,444
Derivative assets	$—	$ —	$—	$—
Derivative liabilities	$—	$ —	$4,096,363	$4,096,363
Contingent consideration obligations related to acquisitions	$—	$ —	$1,595,273	$1,595,273

The Company invests its excess cash balances in short and long-term corporate bonds, generally with remaining maturities of less than two years. At June 30, 2014, the Company had short-term investments of $23,834,408, and long-term investments of $26,284,862, for a total of $50,119,270. The fair value of its investment at June 30, 2014 was $49,735,616. 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 the proceeds from the sale of Unidym in January 2011, Arrowhead received a bond from Wisepower in the face amount of $2.5 million. The bond is convertible to Wisepower common stock at a price of $2.00 per share. The conversion feature is subject to derivative accounting as prescribed under ASC 815. Accordingly, the fair value of the conversion feature on the date of issuance was estimated using an option pricing model and recorded on the Company's Consolidated Balance Sheet as a derivative asset. The fair value of the conversion feature is estimated at the end of each reporting period and the change in the fair value of the conversion feature is recorded as a non-operating gain/loss as change in value of derivatives in Company's Consolidated Statement of Operations. During the quarter ended March 31, 2013, the trading of Wisepower stock was halted. Trading resumed in July 2013, but the trading price is significantly below the conversion price. During fiscal 2013, the Company determined that the probability of realizing value from the conversion feature was remote, and the derivative asset value was reduced to zero.

During the nine months ended June 30, 2014, there was no change in the fair value of the derivative asset.

The assumptions used in valuing the derivative asset were not applicable as the value has been determined to be zero at June 30, 2014 and September 30, 2013.

The following is a reconciliation of the derivative asset:

Value at September 30, 2012	$250,250
Receipt of instruments	—
Decrease in value	(250,250)
Net settlements	—
Value at September 30, 2013	$—
Receipt of instruments	—
Decrease in value	—
Net settlements	—
Value at June 30, 2014	$—

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 June 30, 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 June 30, 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

24,623 warrants were outstanding at June 30, 2014. 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 2010 Warrants, the 2012 Warrants, and the 2013 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 nine months ended June 30, 2014, the Company recorded a non-cash loss from the change in fair value of the derivative liability of $5,680,544.

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

2010 Warrants	June 30, 2014	September 30, 2013
Risk free interest rate	0.11%	0.33%
Expected life	1.5 Years	2.2 Years
Dividend yield	None	None
Volatility	69%	69%
2012 Warrants	June 30, 2014	September 30, 2013
Risk free interest rate	0.88%	1.39%
Expected life	3.5 Years	4.2 Years
Dividend yield	None	None
Volatility	69%	69%
2013 Warrants	June 30, 2014	September 30, 2013
Risk free interest rate	0.88%	1.39%
Expected life	3.6 Years	4.3 Years
Dividend yield	None	None
Volatility	69%	69%

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

Value at September 30, 2012	$626,195
Issuance of instruments	2,153,819
Change in value	5,066,591
Net settlements	(3,754,808)
Value at September 30, 2013	$4,091,797
Issuance of instruments	—
Change in value	5,680,544
Net settlements	(5,789,982)
Value at June 30, 2014	$3,982,359

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 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 (as adjusted for a subsequent reverse stock split). 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 remain outstanding at June 30, 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 as change in value of derivatives in the Company’s Consolidated Statement of Operations. During the nine months ended June 30, 2014, the Company recorded a non-cash loss from the change in fair value of the derivative liability of $31,791.

	June 30, 2014	September 30, 2013
Risk free interest rate	0.88%	1.39%
Expected life	3.5 Years	4.3 Years
Dividend yield	None	None
Volatility	69%	69%

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

Value at September 30, 2012	$10,375
Issuance of instruments	—
Change in value	(5,806)
Net settlements	—
Value at September 30, 2013	$4,569
Issuance of instruments	—
Change in value	31,791
Net settlements	—
Value at June 30, 2014	$36,360

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 the Company's derivatives liabilities is the Company's stock price. Other inputs have a comparatively insignificant effect.

During fiscal 2012, contingent consideration was recorded upon the acquisitions of Roche Madison Inc. and Alvos Therapeutics, Inc., totaling $173,621. 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 own 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, we utilize data regarding similar milestone events from several sources, including industry studies and the Company's experience. These fair value measurements represent Level 3 measurements as they 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 we record in any given period. Changes in the fair value of the contingent consideration obligations are recorded as operating expenses as contingent consideration – fair value adjustments in the Company's Consolidated Statement of Operations.

The following is a reconciliation of contingent consideration fair value.

Value at September 30, 2012	$173,621
Purchase price contingent consideration	—
Contingent consideration payments	—
Change in fair value of contingent consideration	1,421,652
Value at September 30, 2013	$1,595,273
Purchase price contingent consideration	—
Contingent consideration payments	—
Change in fair value of contingent consideration	—
Value at June 30, 2014	$1,595,273

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. 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 Corporation is a biopharmaceutical company developing targeted RNAi therapeutics. The Company is leveraging its proprietary Dynamic Polyconjugate (DPC) delivery platform to develop targeted drugs based on the RNA interference mechanism that efficiently silences disease-causing genes. Arrowhead's pipeline includes ARC-520 for chronic hepatitis B virus, ARC-AAT for liver disease associated with Alpha-1 antitrypsin deficiency, and partner-based programs in obesity and oncology.

Arrowhead is leveraging its in-house R&D expertise and capabilities, as well as a broad intellectual property portfolio for RNAi therapeutics, and RNAi and peptide delivery vehicles and targeting methods to seek development partnerships with other pharmaceutical and biotech companies committed to bringing RNAi therapeutics to market, as well as continuing the preclinical and clinical development of its own clinical candidates.

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

Liquidity and Capital Resources

Arrowhead has historically financed its operations primarily through the sale of Arrowhead securities. Research and development activities have required significant capital investment and are expected to continue to require significant cash investment for the foreseeable future, particularly as clinical trials progress with ARC-520, the Company's candidate for the treatment of hepatitis B (HBV), and as the Company expands its existing candidate pipeline.

At June 30, 2014, the Company had $188.5 million in cash and liquid investments to fund operations. During the nine months ended June 30, 2014, the Company's cash position increased significantly primarily due proceeds from the sale

of equity securities.

During the nine months ended June 30, 2014, cash used in operating activities was $24.5 million, which represents the on-going expenses for research and development activities, business development, and general and administrative expenses.

Cash used in investing activities during the nine months ended June 30, 2014 was $41.0 million, of which $39.8 million related to net investments in marketable fixed income securities. Capital expenditures were $1.3 million.

Cash provided by financing activities in the nine months ended June 30, 2014 was $184.8 million. The Company completed equity financings in October 2013 and in February 2014 with net proceeds of $172.6 million. Additionally, financing activities included cash inflow from the exercise of warrants and options of $12.4 million. Principal payments on capital leases were $0.3 million.

Recent Financing Activity / Sources of Capital

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.

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 Convertible Preferred Stock (the "Preferred Shares"), 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 per share. The aggregate purchase price paid by the Purchasers for the Common Stock and Preferred Shares was $64,000,000 and the Company received net proceeds of approximately $60,000,000, after advisory fees and offering expenses.

Based upon the Company's current cash resources and operating plan, the Company expects to have sufficient liquidity to fund operations for the next twelve months, and beyond.

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 and new accounting standards.

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 non-refundable and/or guaranteed technology license fees, collaborative research funding, and various milestone and future product royalty or profit-sharing payments.

Revenue associated with payments under collaborative agreements for research and development is recognized 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.

Business Combinations

In October 2011, we acquired all of the outstanding common stock of Roche Madison, Inc. and certain related intellectual property assets for a $50,000 promissory note and 1,288,158 shares of Arrowhead Common Stock, an estimated consideration value of $5.1 million on the date of the acquisition. We assigned the value of the consideration to the tangible assets and identifiable intangible assets and the liabilities assumed on the basis of their

fair values on the date of acquisition. The excess of net assets over the consideration was recorded as a non-operating gain.

In April 2012, we acquired all of the outstanding common stock of Alvos Therapeutics, Inc. in exchange for the issuance of 315,457 shares of Arrowhead Common Stock, valued at $2.0 million at the time of acquisition. The consideration was assigned to its tangible and intangible assets, and liabilities based on estimated fair values at the time of acquisition.

The allocation of value to certain items, including property and equipment, intangible assets and certain liabilities require management judgment, and is based upon the information available at the time of acquisition.

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 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, patents 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 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, and the expected life of the award. 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.

Overview of recent research and development activity

In July 2013, the Company began a Phase 1 clinical trial in Australia in healthy volunteers to characterize the safety profile of ARC-520, its candidate for the treatment of hepatitis B (HBV). No dose-limiting toxicities and no serious adverse events have been noted to date. This trial completed anticipated enrollment in October 2013. The Company began a Phase 2a pilot efficacy study in Hong Kong for chronically infected HBV patients in March 2014. The study is ongoing. In June 2014, the Company announced its next clinical candidate, ARC-AAT, an RNAi therapeutic

designed to treat liver disease associated with Alpha-1 antitrypsin deficiency (AATD). 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 siRNA-based therapeutics by subcutaneous administration.

Results of Operations

The Company had a consolidated loss attributable to Arrowhead of $11,628,919 and $36,199,748 for the three and nine months ended June 30, 2014, respectively, compared to a consolidated loss attributable to Arrowhead of $6,079,010 and $17,451,105 for the three and nine months ended June 30, 2013, respectively. Details of the results of operations are presented below.

Revenue

The Company recorded revenue of $43,750 and $131,250 during the three and nine months ended June 30, 2014, respectively, compared to $43,750 and $246,516 during the three and nine months ended June 30, 2013, respectively. The revenue in fiscal 2014 was related to three license agreements for a research method acquired through the acquisition of Roche Madison, Inc. The revenue in fiscal 2013 also included $115,266 in non-recurring services revenue.

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. The following tables provide details of operating expenses for the three and nine months ended June 30, 2014 and 2013.

Salaries – Three and Nine months ended June 30, 2014 compared to the three and nine months ended June 30, 2013

The Company employs management, administrative, and scientific and technical staff at its corporate offices and its research facility. Salaries expense consists of salary and related benefits. Salary and benefits include two major categories: general and administrative compensation expense, and research and development compensation expense, depending on the primary activities of each employee. The following table provides detail of salary and wage expenses for the three and nine months ended June 30, 2014 as compared to the three and nine months ended June 30, 2013.

(in thousands, except percentages)

	Three months Ended June 30, 2014	% of Expense Category		Three months Ended June 30, 2013	% of Expense Category		Increase (Decrease) $	Increase (Decrease) %	
G&A - compensation-related	$ 692	28	%	$ 638	39	%	$ 54	8	%
R&D - compensation-related	1,762	72	%	1,014	61	%	748	74	%
Total	$ 2,454	100	%	$ 1,652	100	%	$ 802	49	%

	Nine months Ended June 30, 2014	% of Expense Category		Nine months Ended June 30, 2013	% of Expense Category		Increase (Decrease) $	Increase (Decrease) %	
G&A - compensation-related	$ 3,067	40	%	$ 1,875	37	%	$ 1,192	64	%
R&D - compensation-related	4,567	60	%	3,131	63	%	1,436	46	%
Total	$ 7,634	100	%	$ 5,006	100	%	$ 2,628	52	%

G&A compensation expense increased $54,000 from $638,000 during the three months ended June 30, 2013 to $692,000 during the current period. The majority of this change was due to salary increases and headcount changes.

G&A compensation expense increased $1,192,000 from $1,875,000 during the nine months ended June 30, 2013 to $3,067,000 during the current period. The majority of this change was also due to annual performance bonuses paid during the period, none were paid in the previous period. Additionally, a portion of the increase is due to salary increases. G&A headcount remained fairly consistent during the past twelve months.

R&D compensation expense increased $748,000 from $1,014,000 during the three months ended June 30, 2013 to $1,762,000 during the current period. R&D headcount, higher by 24 people at June 30, 2014 versus June 30, 2013, and salary increases accounted for the change in salary expense.

R&D compensation expense increased $1,436,000 from $3,131,000 during the nine months ended June 30, 2013 to $4,567,000 during the current period. Increased headcount and salary increases accounted for the change in salary expense. Annual performance bonuses were paid to certain employees during the nine months ended June 30, 2014 totaling $356,000 in expense; none were paid in the prior period.

General & Administrative Expenses – Three and nine months ended June 30, 2014 compared to the three and nine months ended June 30, 2013

The following table provides detail of G&A expenses for the three and nine months ended June 30, 2014 as compared to the three and nine months ended June 30, 2013.

(in thousands, except percentages)

	Three Ended June 30, 2014	% of Expense Category	Three Ended June 30, 2013	% of Expense Category	Increase (Decrease) $	Increase (Decrease) %
Professional/outside services	$759	48 %	$ 323	36 %	$436	135 %
Patent expense	139	9 %	257	29 %	(118)	-46 %
Facilities and related	43	3 %	41	5 %	2	5 %
Travel	234	15 %	141	16 %	93	66 %
Business insurance	97	6 %	49	6 %	48	98 %
Communication and Technology	88	6 %	26	3 %	62	238 %
Office expenses	139	9 %	22	2 %	117	532 %
Other	83	5 %	40	4 %	43	108 %
Total	$1,582	100 %	$ 899	100 %	$683	76 %

	Nine Ended June 30, 2014	% of Expense Category	Nine Ended June 30, 2013	% of Expense Category	Increase (Decrease) $	Increase (Decrease) %
Professional/outside services	$1,778	46 %	$992	38 %	$786	79 %
Patent expense	540	14 %	707	27 %	(167)	-24 %
Facilities and related	137	4 %	127	5 %	10	8 %
Travel	473	12 %	333	13 %	140	42 %
Business insurance	209	5 %	148	6 %	61	41 %
Communication and Technology	252	7 %	113	4 %	139	123 %
Office expenses	293	8 %	81	3 %	212	262 %
Other	184	5 %	96	4 %	88	92 %
Total	$3,866	100 %	$2,597	100 %	$1,269	49 %

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 $436,000 from $323,000 during the three months ended June 30, 2013 to $759,000 during the current period. Professional/outside services expense increased $786,000 from $992,000 during the nine months ended June 30, 2013 to $1,778,000 during the current period. The increase in

professional fees primarily related to professional recruiting fees for the hiring of new R&D personnel to support and expand its clinical pipeline. Additionally, the Company incurred higher SEC filing fees associated with financing in February 2014 and higher NASDAQ fees based on a higher number of shares outstanding.

Patent expense decreased $118,000 from $257,000 during the three months ended June 30, 2013 to $139,000 during the current period. Patent expense decreased $167,000 from $707,000 during the nine months ended June 30, 2013 to $540,000 during the current period. Patent expenses related to Calando declined by $145,000 in the nine month period, and $31,000 in the three month period. Calando reduced its patent expense cost by terminating its license agreement with Caltech in August 2013, which had obligated Calando to pay certain related patent costs, and by curtailing prosecution of other non-strategic patents. Accordingly, patent expense related to Calando is expected to be negligible going forward. Additionally, during the nine months ended June 30, 2014, Arrowhead deconsolidated Calando based on the fact that Calando is now subject to the control of a bankruptcy trustee. During the three and nine months ended June 30, 2014, patent costs related to our DPC platform increased which partially offset the decrease in the Calando costs. This is due timing of patent filings. 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 internationally. 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 remained consistent at $41,000 during the three months ended June 30, 2013, compared to $43,000 in the current period. Facilities-related expense increased $10,000 from $127,000 during the nine months ended June 30, 2013 to $137,000 during the current period. Facilities expense increased due to routine increases in ancillary lease charges.

Travel expense increased $93,000 from $141,000 during the three months ended June 30, 2013 to $234,000 during the current period. Travel expense increased $140,000 from $333,000 during the nine months ended June 30, 2013 to $473,000 during the current period. Travel expense increased due to travel in support of our R&D function, primarily our GMP manufacturing campaign.

Business insurance expense increased $48,000 from $49,000 during the three months ended June 30, 2013 to $97,000 during the current period. Business insurance expense increased $61,000 from $148,000 during the nine months ended June 30, 2013 to $209,000 during the current period. Business insurance costs increased slightly primarily related to added coverage related to the Company's clinical trials.

Communication and technology expense increased $62,000 from $26,000 during the three months ended June 30, 2013 to $88,000 during the current period. Communication and technology expense increased $139,000 from $113,000 during the nine months ended June 30, 2013 to $252,000 during the current period. The increase was related to equipment purchases to replace outdated equipment and to outfit new employees.

Office expense increased $117,000 from $22,000 during the three months ended June 30, 2013 to $139,000 during the current period. Office expense increased $212,000 from $81,000 during the nine months ended June 30, 2013 to $293,000 during the current period. The increase was related to conferences/training, office supplies, miscellaneous administrative expenses, and expenses related to an office expansion at our R&D facility in Madison.

Other expense increased $43,000 from $40,000 during the three months ended June 30, 2013 to $83,000 during the current period. Other expense increased $88,000 from $96,000 during the nine months ended June 30, 2013 to $184,000 during the current period. The increase was related to trade shows, conferences and marketing materials.

Research and Development Expenses – Three and nine months ended June 30, 2014 compared to the three and nine months ended June 30, 2013

R&D expenses are related to the Company's on-going research and development efforts, primarily its laboratory research efforts based in Madison, Wisconsin, and also include outsourced R&D services. The following table provides detail of R&D expenses for the three and nine months ended June 30, 2014, as compared to the three and nine months ended June 30, 2013.

(in thousands, except percentages)

	Three Months Ended June 30, 2014	% of Expense Category	Three Months Ended June 30, 2013	% of Expense Category	Increase (Decrease) $	Increase (Decrease) %
Laboratory supplies & services	$ 613	10 %	$ 219	13 %	$ 394	180 %
In vivo studies	64	1 %	99	6 %	(35)	-35 %
Outside labs & contract services	329	5 %	87	5 %	242	278 %
Toxicity/efficacy studies	2,109	33 %	495	28 %	1,614	326 %
Drug Manufacturing	2,371	37 %	386	22 %	1,985	514 %
Clinical trials	555	9 %	205	12 %	350	171 %
Consulting	102	2 %	61	4 %	41	67 %
License, royalty & milestones	12	0 %	13	1 %	(1)	-8 %
Facilities and related	206	3 %	178	10 %	28	16 %

Other research expenses	31	1	%	13	1	%	18	138%
Total	$ 6,392	100	%	$ 1,756	100	%	$ 4,636	264%

	Nine Months Ended June 30, 2014	% of Expense Category	Nine Months Ended June 30, 2013	% of Expense Category	Increase (Decrease) $	Increase (Decrease) %
Laboratory supplies & services	$1,469	10 %	$755	14 %	$714	95 %
In vivo studies	236	2 %	548	10 %	(312)	-57 %
Outside labs & contract services	775	5 %	377	7 %	398	106%
Toxicity/efficacy studies	3,651	25 %	879	16 %	2,772	315%
Drug Manufacturing	5,630	38 %	1,309	24 %	4,321	330%
Clinical trials	1,978	13 %	483	9 %	1,495	310%
Consulting	193	1 %	193	4 %	-	0 %
License, royalty & milestones	32	0 %	175	3 %	(143)	-82 %
Facilities and related	685	5 %	542	10 %	143	26 %
Other research expenses	71	1 %	197	4 %	(126)	-64 %
Total	$14,720	100 %	$5,458	100 %	$9,262	170%

Laboratory supplies and services expense increased $394,000 from $219,000 during the three months ended June 30, 2013 to $613,000 during the current period. Laboratory supplies and services expense increased $714,000 from $755,000 during the nine months ended June 30, 2013 to $1,469,000 during the current period. The increase is a result of additional supplies necessary to support increased efforts in pre-clinical research as the Company accelerates efforts to identify new clinical candidates as well as to support ongoing clinical efforts.

In vivo studies expense decreased $35,000 from $99,000 during the three months ended June 30, 2013 to $64,000 during the current period. In vivo studies expense decreased $312,000 from $548,000 during the nine months ended June 30, 2013 to $236,000 during the current period. The prior period expense relates to studies related to development of new clinical candidates.

Outside labs and contract services expense increased $242,000 from $87,000 during the three months ended June 30, 2013 to $329,000 during the current period. Outside labs and contract services expense increased $398,000 from $377,000 during the nine months ended June 30, 2013 to $775,000 during the current period. The increase was primarily related to oligonucleotide synthesis related to development of new clinical candidates.

Toxicity/efficacy studies expense increased $1,614,000 from $495,000 during the three months ended June 30, 2013 to $2,109,000 during the current period. Toxicity studies expense increased $2,772,000 from $879,000 during the nine months ended June 30, 2013 to $3,651,000 during the current period. This category includes IND-enabling toxicology studies as well as non-clinical toxicology studies, such as long-term toxicology studies, and other efficacy studies. The current period expense primarily relates to toxicology studies related to ARC-520, our clinical candidate for HBV, specifically toxicology studies to support our anticipated phase 2b clinical trial.

Drug Manufacturing expense increased $1,985,000 from $386,000 during the three months ended June 30, 2013 to $2,371,000 during the current period. Drug Manufacturing expense increased $4,321,000 from $1,309,000 during the nine months ended June 30, 2013 to $5,630,000 during the current period. The current period expense relates to drug manufacturing to supply toxicology studies for our anticipated HBV Phase 2b clinical trial, as well as to supply the Phase 2b clinical trial anticipated for 2015. The Phase 2b clinical trial 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 $350,000 from $205,000 during the three months ended June 30, 2013 to $555,000 during the current period. Clinical trials expense increased $1,495,000 from $483,000 during the nine months ended June 30, 2013 to $1,978,000 during the current period. Clinical trial expenses are increasing as the Company advances ARC-520, its drug candidate for Hepatitis B.

Consulting expense increased $41,000 from $61,000 during the three months ended June 30, 2013 to $102,000 during the current period. Consulting expense was consistent at $193,000 during each of the nine months ended June 30, 2013 and 2014 respectively. The majority of consulting expense during the current period relates to regulatory and clinical efforts.

License, royalty and milestones expense was consistent at $13,000 and $12,000 during the three months ended June 30, 2013 and 2014 respectively. License, royalty and milestones expense decreased $143,000 from $175,000 during the nine months ended June 30, 2013 to $32,000 during the current period. Licensing fees, royalty and milestones expenses in the prior year were primarily related to a one-time fee of $120,000 related to access to certain targeting technology.

Facilities expense increased $28,000 from $178,000 during the three months ended June 30, 2013 to $206,000 during the current period. Facilities expense increased $143,000 from $542,000 during the nine months ended June 30, 2013 to $685,000 during the current period. Facilities expenses were higher in the current period primarily due to repairs and maintenance costs on lab equipment. Although much of our equipment is under maintenance contracts, certain additional expenses were incurred during the current quarter.

Other research expense increased $18,000 from $13,000 during the three months ended June 30, 2013 to $31,000 during the current period. Other research expense decreased $126,000 from $197,000 during the nine months ended June 30, 2013 to $71,000 during the current period. Other research expense in the prior period relates to work at the University of Cincinnati related to our obesity program, which studies have been completed, and no further studies are currently planned.

Stock-based compensation expense

Stock-based compensation expense, a non-cash expense, increased $1,675,000 from $364,000 during the three months ended June 30, 2013 to $2,039,000 in the current period. Stock-based compensation expense increased $2,644,000 from $1,114,000 during the nine months ended June 30, 2013 to $3,758,000 during the current 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. The increase in this expense is primarily due to new options granted in 2013, including grants of restricted stock units.

Depreciation and amortization expense

Depreciation and amortization expense, a non-cash expense, decreased $178,000 from $454,000 during the three months ended June 30, 2013 to $276,000 in the current period. Depreciation and amortization expense decreased $277,000 from $1,352,000 during the nine months ended June 30, 2013 to $1,075,000 during the current period. The decrease is primarily related to amortization of capitalized patents related to Calando, which were fully written off in fiscal 2013, thus no further amortization will be recorded.

Other income / expense

Other income increased $861,000 from $212,000 during the three months ended June 30, 2013 to $1,074,000 during the current period. This increase is primarily related to the change in the value of derivative liabilities related to certain warrants with a price adjustment feature, which requires derivative accounting. Other expense increased $4,065,000 from $1,308,000 during the nine months ended June 30, 2013 to $5,373,000 during the current period, also primarily related to the change in the value of the derivative liabilities discussed above.

Off-Balance Sheet Arrangements

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

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

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.

In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Accordingly, our disclosure controls and procedures have been designed to provide reasonable assurance of achieving their objectives.

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.

PART II—OTHER INFORMATION

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.

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, 2013. 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, 2013, 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.

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ITEM 6. EXHIBITS

Exhibit Number	Document Description
10.1	License Agreement by and between Alnylam Pharmaceuticals, Inc., Arrowhead Research Corporation and Arrowhead Madison, Inc.†
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 June 30, 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. *

† Confidential treatment has been requested with respect to certain information contained in this exhibit. Such information has been omitted and furnished separately to the SEC.
* 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: August 12, 2014

ARROWHEAD RESEARCH CORPORATION
By: /s/ Kenneth A. Myszkowski
Kenneth A. Myszkowski
Chief Financial Officer