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

# FORM 10-Q

**(Mark One)**

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

**For the quarterly period ended June 30, 2024**

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

**For the transition period from to**

**Commission file number 001-38042**

## ARROWHEAD PHARMACEUTICALS, INC.

**(Exact name of registrant as specified in its charter)**

| **Delaware** | **46-0408024** |
|---|---|
| **(State or other jurisdiction of incorporation or organization)** | **(I.R.S. Employer Identification No.)** |

**177 E. Colorado Blvd, Suite 700**
**Pasadena, California 91105**
**(626) 304-3400**
**(Address and telephone number of principal executive offices)**

Former name, former address, and former fiscal year, if changed since last report: N/A

**Securities registered pursuant to Section 12(b) of the Exchange Act:**

| Title of each class | Trading Symbol(s) | Name of each exchange on which registered |
|---|---|---|
| **Common Stock, par value $0.001 per share** | **ARWR** | **The Nasdaq Global Select Market** |

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files). Yes ☒ No ☐

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

| | | | |
|---|---|---|---|
| Large Accelerated Filer | ☒ | Accelerated Filer | ☐ |
| Non-Accelerated Filer | ☐ | Smaller Reporting Company | ☐ |
| Emerging Growth Company | ☐ | | |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

The number of shares of the registrant's common stock outstanding as of August 1, 2024 was 124,315,274.

## PART I. FINANCIAL INFORMATION

### ITEM 1. FINANCIAL STATEMENTS

**Arrowhead Pharmaceuticals, Inc.**
**Consolidated Balance Sheets**
**(In thousands, except per share amounts)**

| | June 30, 2024 | September 30, 2023 |
|---|---|---|
| | (unaudited) | |
| **ASSETS** | | |
| Current assets: | | |
| Cash, cash equivalents and restricted cash | $ 69,399 | $ 110,891 |
| Available-for-sale securities, at fair value | 367,272 | 292,735 |
| Prepaid expenses | 9,207 | 8,813 |
| Other current assets | 4,184 | 4,033 |
| Total current assets | 450,062 | 416,472 |
| Property, plant and equipment, net | 375,911 | 290,262 |
| Intangible assets, net | 8,987 | 10,262 |
| Right-of-use assets | 44,339 | 45,297 |
| Other assets | 4,460 | 3,259 |
| **Total Assets** | **$ 883,759** | **$ 765,552** |
| **LIABILITIES, NONCONTROLLING INTEREST AND STOCKHOLDERS' EQUITY** | | |
| Current liabilities: | | |
| Accounts payable | $ 26,550 | $ 35,866 |
| Accrued expenses | 47,899 | 39,763 |
| Accrued payroll and benefits | 15,795 | 17,963 |
| Lease liabilities | 6,053 | 10,563 |
| Deferred revenue | — | 866 |
| Other liabilities | 417 | 435 |
| Total current liabilities | 96,714 | 105,456 |
| Long-term liabilities: | | |
| Lease liabilities, net of current portion | 112,040 | 104,608 |
| Liability related to the sale of future royalties | 336,031 | 268,326 |
| Total long-term liabilities | 448,071 | 372,934 |
| Commitments and contingencies (Note 7) | | |
| Noncontrolling interest and stockholders' equity: | | |
| Common stock, $0.001 par value: Authorized 290,000 shares; issued and outstanding 124,227 and 107,312 shares | 217 | 200 |
| Additional paid-in capital | 1,786,304 | 1,300,395 |
| Accumulated other comprehensive loss | (987) | (3,222) |
| Accumulated deficit | (1,454,987) | (1,026,030) |
| Total Arrowhead Pharmaceuticals, Inc. stockholders' equity | 330,547 | 271,343 |
| Noncontrolling interest | 8,427 | 15,819 |
| Total noncontrolling interest and stockholders' equity | 338,974 | 287,162 |
| **Total Liabilities, Noncontrolling Interest and Stockholders' Equity** | **$ 883,759** | **$ 765,552** |

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

**Arrowhead Pharmaceuticals, Inc.**
**Consolidated Statements of Operations and Comprehensive Loss**
**(In thousands, except per share amounts)**
**(unaudited)**

| | Three Months Ended June 30, | | Nine Months Ended June 30, | |
|---|---|---|---|---|
| | 2024 | 2023 | 2024 | 2023 |
| **Revenue** | **$ —** | **$ 15,825** | **$ 3,551** | **$ 224,638** |
| **Operating expenses:** | | | | |
| Research and development | 152,431 | 94,757 | 370,044 | 253,333 |
| General and administrative | 23,710 | 23,771 | 72,384 | 67,977 |
| Total operating expenses | **176,141** | **118,528** | **442,428** | **321,310** |
| Operating loss | (176,141) | (102,703) | (438,877) | (96,672) |
| **Other income (expense):** | | | | |
| Interest income | 6,498 | 4,172 | 15,550 | 11,414 |
| Interest expense | (5,094) | (5,158) | (17,705) | (13,064) |
| Other, net | 760 | 306 | 1,370 | 821 |
| Total other income (expense) | **2,164** | **(680)** | **(785)** | **(829)** |
| Loss before income tax expense (benefit) and noncontrolling interest | **(173,977)** | **(103,383)** | **(439,662)** | **(97,501)** |
| Income tax expense (benefit) | — | 742 | (3,313) | 759 |
| Net loss including noncontrolling interest | **(173,977)** | **(104,125)** | **$ (436,349)** | **$ (98,260)** |
| Net loss attributable to noncontrolling interest, net of tax | (3,184) | (1,179) | (7,392) | (2,664) |
| Net loss attributable to Arrowhead Pharmaceuticals, Inc. | **$ (170,793)** | **$ (102,946)** | **$ (428,957)** | **$ (95,596)** |
| Net loss per share attributable to Arrowhead Pharmaceuticals, Inc.: | | | | |
| Basic | $ (1.38) | $ (0.96) | $ (3.63) | $ (0.90) |
| Diluted | $ (1.38) | $ (0.96) | $ (3.63) | $ (0.90) |
| Weighted-average shares used in calculating | | | | |
| Basic | 124,199 | 107,004 | 118,260 | 106,597 |
| Diluted | 124,199 | 107,004 | 118,260 | 106,597 |
| Other comprehensive loss, net of tax: | | | | |
| Change in unrealized losses on available-for-sale securities | 249 | — | 2,374 | — |
| Foreign currency translation adjustments | (141) | (79) | (139) | (275) |
| Comprehensive loss | **$ (173,869)** | **$ (104,204)** | **$ (434,114)** | **$ (98,535)** |

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

**Arrowhead Pharmaceuticals, Inc.**
**Consolidated Statements of Stockholders' Equity**
**(In thousands)**
**(unaudited)**

| | Common Stock | Amount ($) | Additional Paid-In Capital | Accumulated Other Comprehensive Loss | Accumulated Deficit | Non-controlling Interest | Total |
|---|---|---|---|---|---|---|---|
| **Balance at September 30, 2023** | **107,312** | **$ 200** | **$ 1,300,395** | **$ (3,222)** | **$ (1,026,030)** | **$ 15,819** | **$ 287,162** |
| Stock-based compensation | — | — | 19,694 | — | — | — | **19,694** |
| Exercise of stock options | 34 | — | 267 | — | — | — | **267** |
| Common stock - restricted stock units vesting | 154 | — | — | — | — | — | **—** |
| Foreign currency translation adjustments | — | — | — | 58 | — | — | **58** |
| Change in unrealized losses on available-for-sale securities | — | — | — | 1,909 | — | — | **1,909** |
| Net loss | — | — | — | — | (132,864) | (2,512) | **(135,376)** |
| **Balance at December 31, 2023** | **107,500** | **$ 200** | **$ 1,320,356** | **$ (1,255)** | **$ (1,158,894)** | **$ 13,307** | **$ 173,714** |
| Stock-based compensation | — | — | 17,750 | — | — | — | **17,750** |
| Exercise of stock options | 120 | — | 1,512 | — | — | — | **1,512** |
| Common stock - restricted stock units vesting | 723 | 1 | (1) | — | — | — | **—** |
| Common stock issued, net of offering costs | 15,790 | 16 | 429,249 | — | — | — | **429,265** |
| Foreign currency translation adjustments | — | — | — | (56) | — | — | **(56)** |
| Change in unrealized losses on available-for-sale securities | — | — | — | 216 | — | — | **216** |
| Net loss | — | — | — | — | (125,300) | (1,696) | **(126,996)** |
| **Balance at March 31, 2024** | **124,133** | **$ 217** | **$ 1,768,866** | **$ (1,095)** | **$ (1,284,194)** | **$ 11,611** | **$ 495,405** |
| Stock-based compensation | — | — | 17,050 | — | — | — | **17,050** |
| Exercise of stock options | 43 | — | 388 | — | — | — | **388** |
| Common stock - restricted stock units vesting | 51 | — | — | — | — | — | **—** |
| Foreign currency translation adjustments | — | — | | (141) | — | — | **(141)** |
| Change in unrealized losses on available-for-sale securities | — | — | — | 249 | — | — | **249** |
| Net loss | — | — | — | — | (170,793) | (3,184) | **(173,977)** |
| **Balance at June 30, 2024** | **124,227** | **$ 217** | **$ 1,786,304** | **$ (987)** | **$ (1,454,987)** | **$ 8,427** | **$ 338,974** |

| | Common Stock | Amount ($) | Additional Paid-In Capital | Accumulated Other Comprehensive Loss | Accumulated Deficit | Non-controlling Interest | Total |
|---|---|---|---|---|---|---|---|
| **Balance at September 30, 2022** | **105,960** | **$ 198** | **$ 1,219,213** | **$ (136)** | **$ (820,755)** | **$ 19,819** | **$ 418,339** |
| Stock-based compensation | — | — | 19,390 | — | — | — | **19,390** |
| Exercise of stock options | 82 | — | 576 | — | — | — | **576** |
| Common stock - restricted stock units vesting | 98 | 1 | (1) | — | — | — | **—** |
| Foreign currency translation adjustments | — | — | — | (122) | — | — | **(122)** |
| Net loss | — | — | — | — | (41,325) | (486) | **(41,811)** |
| **Balance at December 31, 2022** | **106,140** | **$ 199** | **$ 1,239,178** | **$ (258)** | **$ (862,080)** | **$ 19,333** | **$ 396,372** |
| Stock-based compensation | — | — | 20,612 | — | — | — | **20,612** |
| Exercise of stock options | 64 | — | 520 | — | — | — | **520** |
| Common stock - restricted stock units vesting | 665 | — | — | — | — | — | **—** |
| Foreign currency translation adjustments | — | — | — | (74) | — | — | **(74)** |
| Net income | — | — | — | — | 48,675 | (999) | **47,676** |
| **Balance at March 31, 2023** | **106,869** | **$ 199** | **$ 1,260,310** | **$ (332)** | **$ (813,405)** | **$ 18,334** | **$ 465,106** |
| Stock-based compensation | — | — | 19,947 | — | — | — | **19,947** |
| Exercise of stock options | 198 | — | 1,136 | — | — | — | **1,136** |
| Common stock - restricted stock units vesting | 35 | — | — | — | — | — | **—** |
| Foreign currency translation adjustments | — | — | — | (79) | — | — | **(79)** |
| Net loss | — | — | — | — | (102,946) | (1,179) | **(104,125)** |
| **Balance at June 30, 2023** | **107,102** | **$ 199** | **$ 1,281,393** | **$ (411)** | **$ (916,351)** | **$ 17,155** | **$ 381,985** |

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

**Arrowhead Pharmaceuticals, Inc.**
**Consolidated Statements of Cash Flows**
**(in thousands)**
**(unaudited)**

| | Nine Months Ended June 30, | |
|---|---|---|
| | **2024** | **2023** |
| CASH FLOWS FROM OPERATING ACTIVITIES: | | |
| Net loss | $ (436,349) | $ (98,260) |
| Adjustments to reconcile net loss to net cash flow from operating activities | | |
| Stock-based compensation | 54,494 | 59,949 |
| Depreciation and amortization | 13,570 | 8,634 |
| Amortization (accretion) of note premiums/discounts | 7,886 | (1,030) |
| Realized gain on investments | (80) | — |
| Non-cash interest expense on liability related to the sale of future royalties | 17,705 | 13,064 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | — | 164 |
| Prepaid expenses and other assets | (1,746) | 27,913 |
| Accounts payable | 2,785 | 5,001 |
| Accrued expenses | 13,086 | (32,082) |
| Deferred revenue | (866) | (113,144) |
| Operating lease, net | 3,880 | 1,827 |
| Net cash used in operating activities | (325,635) | (127,964) |
| CASH FLOWS FROM INVESTING ACTIVITIES: | | |
| Purchases of property and equipment | (117,180) | (112,830) |
| Purchases of investments | (428,611) | (233,984) |
| Proceeds from sales and maturities of investments | 348,642 | 220,150 |
| Net cash used in investing activities | (197,149) | (126,664) |
| CASH FLOWS FROM FINANCING ACTIVITIES: | | |
| Proceeds from the exercises of stock options | 2,166 | 2,232 |
| Proceeds from the issuance of common stock, net of offering costs | 429,265 | — |
| Proceeds from the sale of future royalties | 50,000 | 250,000 |
| Net cash provided by financing activities | 481,431 | 252,232 |
| Net decrease in cash, cash equivalents and restricted cash | (41,353) | (2,396) |
| Effect of exchange rate on cash, cash equivalents and restricted cash | (139) | (275) |
| | | |
| CASH, CASH EQUIVALENTS AND RESTRICTED CASH: | | |
| BEGINNING OF PERIOD | 110,891 | 108,005 |
| END OF PERIOD | $ 69,399 | $ 105,334 |
| | | |
| **Supplementary disclosure of cash flows:** | | |
| Income taxes paid | $ (3,062) | $ — |
| | | |
| **Supplemental disclosure of non-cash investing activities:** | | |
| Capital expenditures included in accrued expenses | $ 6,909 | $ 15,624 |

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

## NOTE 1. ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

***General and Recent Developments***

Arrowhead Pharmaceuticals, Inc. and its subsidiaries (referred to herein collectively as the "Company") are primarily engaged in developing medicines that treat intractable diseases by silencing the genes that cause them. Using a broad portfolio of RNA chemistries and efficient modes of delivery, the Company's therapies trigger the RNA interference mechanism to induce rapid, deep and durable knockdown of target genes. RNA interference ("RNAi") is a mechanism present in living cells that inhibits the expression of a specific gene, thereby affecting the production of a specific protein. The Company's RNAi-based therapeutics may leverage this natural pathway of gene silencing to target and shut down specific disease-causing genes.

The following table presents the Company's current pipeline:

| Therapeutic Area | Name | Stage | Product Rights |
|---|---|---|---|
| **Cardiometabolic** | plozasiran (ARO-APOC3) | Phase 3 | Arrowhead |
| | zodasiran (ARO-ANG3) | Phase 2b | Arrowhead |
| | olpasiran | Phase 3 | Amgen |
| **Pulmonary** | ARO-RAGE | Phase 1/2a | Arrowhead |
| | ARO-MUC5AC | Phase 1/2a | Arrowhead |
| | ARO-MMP7 | Phase 1/2a | Arrowhead |
| **Liver** | GSK-4532990 | Phase 2b | GSK |
| | fazirsiran | Phase 3 | Takeda and Arrowhead |
| | daplusiran/tomligisiran (GSK5637608, formerly JNJ-3989) | Phase 2 | GSK |
| | ARO-PNPLA3 | Phase 1 | Arrowhead |
| | ARO-C3 | Phase 1/2a | Arrowhead |
| | ARO-CFB | Phase 1/2a | Arrowhead |
| **Muscle** | ARO-DUX4 | Phase 1/2a | Arrowhead |
| | ARO-DM1 | Phase 1/2a | Arrowhead |
| **Central Nervous System (CNS)** | Various | Pre-Clinical | Arrowhead |

The Company operates lab facilities in California and Wisconsin, where its research and development activities, including the development of RNAi therapeutics, take place. The Company's principal executive offices are located in Pasadena, California.

Thus far in fiscal 2024, the Company has continued to develop and advance its pipeline and partnered candidates. Several key recent developments include:

- Announced plans to advance investigational plozasiran into a Phase 3 cardiovascular outcomes trial called CAPITAN, which is designed to enroll patients with mixed hyperlipidemia and residual risk of atherosclerotic cardiovascular disease;
- Announced successful top-line results from the pivotal Phase 3 PALISADE study of investigational plozasiran in patients with familial chylomicronemia syndrome (FCS). The Company highlighted recent data for its cardiometabolic pipeline at its June 25, 2024, Cardiometabolic event;
- Presented preclinical data on ARO-INHBE for the treatment of obesity and metabolic diseases at the American Diabetes Association 84$^{th}$ Scientific Sessions. INHBE small interfering RNA (siRNA) administration resulted in multiple promising findings including: (1) 95% reduction in INHBE mRNA expression, (2) 19% suppression of body weight compared to saline controls, (3) 26% loss of fat mass, and (4) preservation of lean mass;
- Announced results from the Phase 2b double blind, randomized ARCHES-2 study of investigational zodasiran in patients with mixed hyperlipidemia;

- Announced that new interim clinical data on ARO-RAGE achieves high level of gene knockdown in patients with asthma;
- Completed enrollment in Amgen's Phase 3 OCEAN(a) - outcome trial of olpasiran, triggering a $50.0 million milestone payment to the Company, which was paid in the third quarter of fiscal 2024;
- Presented final data from the double-blind treatment period of the Company's Phase 2 SHASTA-2 study of investigational plozasiran in patients with severe Hypertriglyceridemia. Results from the SHASTA-2 study showed dramatic, consistent, and sustained reductions in Apolipoprotein C-III (APOC3) and triglycerides and improvement in multiple atherogenic lipoprotein levels;
- Announced an Expanded Access Program ("EAP") to make investigational plozasiran available outside of a clinical trial for qualifying patients with FCS;
- Initiated a Phase 1/2a clinical trial of ARO-DM1, being developed as a potential treatment for type 1 myotonic dystrophy (DM1), the most common adult-onset muscular dystrophy;
- Filed an application for clearance to initiate a Phase 1/2a clinical trial of ARO-CFB, being developed as a potential treatment for complement mediated renal disease;
- Entered into an Amended and Restated License Agreement with GSK, pursuant to which GSK received a worldwide, exclusive license to develop and commercialize daplusiran/tomligisiran (GSK5637608, formerly JNJ-3989). Daplusiran/tomligisiran had previously been licensed to Janssen Pharmaceuticals, Inc. See Note 2.

***Consolidation and Basis of Presentation***

The interim Consolidated Financial Statements include the accounts of Arrowhead Pharmaceuticals, Inc. and its subsidiaries (wholly-owned subsidiaries and a variable interest entity for which the Company is the primary beneficiary). Subsidiaries refer to Arrowhead Madison, Inc., Visirna Therapeutics, Inc. ("Visirna"), and Arrowhead Australia Pty Ltd. For subsidiaries in which the Company owns or is exposed to less than 100% of the economics, the Company records net loss attributable to noncontrolling interests in its consolidated statements of operations equal to the percentage of the economic or ownership interests retained in such entity by the respective noncontrolling party.

The interim Consolidated Financial Statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP"). The financial data of the Company included herein are unaudited. In the opinion of management, all material adjustments of a normal recurring nature have been made to present fairly the Company's financial position at June 30, 2024 and the results of operations and cash flows for the periods presented. All intercompany transactions and balances have been eliminated. Certain prior period amounts have been reclassified to conform with the current period presentation.

Certain financial information that is normally included in annual financial statements prepared in accordance with GAAP, but that is not required for interim reporting purposes, has been omitted from the accompanying interim consolidated financial statements and related notes. Readers are urged to review the Company's Annual Report on Form 10-K for the year ended September 30, 2023 for more complete descriptions and discussions. Operating results and cash flows for the nine months ended June 30, 2024 are not necessarily indicative of the results that may be expected for the fiscal year ending September 30, 2024.

***Liquidity***

The Company's primary sources of financing have been through the sale of its equity securities, revenue from its licensing and collaboration agreements and the sale of certain future royalties. Research and development activities have required significant capital investment since the Company's inception and are expected to continue to require significant cash expenditure in the future, particularly as the Company's pipeline of drug candidates and its headcount have both expanded. Additionally, significant capital investment will be required as the Company's pipeline matures into later stage clinical trials.

As of June 30, 2024, the Company had $69.4 million in cash, cash equivalents and restricted cash ($2.2 million in restricted cash) and $367.3 million in available-for-sale securities to fund operations. During the nine months ended June 30, 2024, the Company's cash, cash equivalents and restricted cash and investments balance increased by $33.0 million which was primarily due to the net proceeds of $429.3 million from the underwritten offering in January 2024 discussed below, offset by ongoing expenses related to the Company's research and development programs, general and administrative expenses and capital expenditures.

On January 2, 2024, the Company entered into an underwriting agreement with Jefferies LLC, BofA Securities, Inc.,

and Cowen and Company, LLC, as representatives of the several underwriters. The Company issued 15,790,000 shares of common stock at a price of $28.50 per share. The aggregate purchase price paid by investors was $450.0 million and the Company received net proceeds of $429.3 million after deducting advisory fees and offering expenses.

In total, the Company is eligible to receive up to $2.7 billion in developmental, regulatory and sales milestones, and may receive various royalties on net sales from its licensing and collaboration agreements, subject to the terms and conditions of those agreements. The revenue recognition for these collaboration agreements is discussed further in Note 2.

***Summary of Significant Accounting Policies***

There have been no changes to the significant accounting policies disclosed in the Company's most recent Annual Report on Form 10-K for the fiscal year ended September 30, 2023.

***Uncertainty in Income Taxes***

The Company recorded an income tax benefit of $3.3 million and expense of $0.8 million for the nine months ended June 30, 2024 and 2023, respectively. The income tax benefit is primarily due to the discrete change in the Company's uncertain tax positions related to the statute of limitation expiration.

***Recent Accounting Pronouncements***

In December 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*, to improve its income tax disclosure requirements. Under the guidance, entities must annually (1) disclose specific categories in the rate reconciliation and (2) provide additional information for reconciling items that meet a quantitative threshold. This guidance will become effective for the Company beginning on October 1, 2025. The Company does not expect any material impact on its consolidated financial statements and related disclosures resulting from applying this ASU.

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures,* which is intended to improve reportable segment disclosure requirements, primarily through additional disclosures about significant segment expenses. The guidance requires public companies with a single reportable segment to provide all disclosures required under ASC 280. In addition, the guidance requires public companies to include in interim reports all disclosures related to a reportable segment's profit or loss and assets that are currently required in annual reports. The standard is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The amendments should be applied retrospectively to all prior periods presented in the financial statements. The Company does not expect any material impact on its consolidated financial statements and related disclosures resulting from applying this ASU.

## NOTE 2. COLLABORATION AND LICENSE AGREEMENTS

The following table provides a summary of revenue recognized:

| | Three Months Ended June 30, | | Nine Months Ended June 30, | |
|---|---|---|---|---|
| | 2024 | 2023 | 2024 | 2023 |
| | | (in thousands) | | |
| GSK | $ — | $ 277 | $ 2,685 | $ 29 |
| Horizon | — | 1,539 | — | 23 |
| Takeda | — | 14,009 | 866 | 146 |
| Janssen | — | — | — | |
| Amgen | — | — | — | 25 |
| **Total** | $ — | $ 15,825 | $ 3,551 | $ 224 |

The following table summarizes the balance of receivables and contract liabilities related to the Company's

collaboration and license agreements:

| | June 30, 2024 | September 30, 2023 |
|---|---|---|
| | (in thousands) | |
| Receivables included in accounts receivable | $ — | $ — |
| Contract liabilities included in deferred revenue | $ — | $ 866 |

***Glaxosmithkline Intellectual Property (No. 3) Limited ("GSK")***

***GSK-HSD License Agreement***

On November 22, 2021, GSK and the Company entered into an Exclusive License Agreement (the "GSK-HSD License Agreement"). Under the GSK-HSD License Agreement, GSK has received an exclusive license for GSK-4532990 (formerly ARO-HSD). The exclusive license is worldwide with the exception of greater China. GSK is wholly responsible for all clinical development and commercialization of GSK-4532990 in its territory. GSK dosed the first patient in a Phase 2b trial in March 2023 and paid a $30.0 million milestone payment to the Company in the third quarter of fiscal 2023.

The Company is eligible for an additional payment of $100.0 million upon achieving the first patient dosed in a Phase 3 trial. Furthermore, should the Phase 3 trial read out positively, and the potential new medicine receives regulatory approval in major markets, the deal provides for commercial milestone payments to the Company of up to $190.0 million at first commercial sale, and up to $590.0 million in sales-related milestone payments. The Company is further eligible to receive tiered royalties on net product sales in a range of mid-teens to twenty percent.

***GSK-HBV Agreement***

On December 11, 2023, the Company entered into an Amended and Restated License Agreement with GSK (the "GSK-HBV Agreement") pursuant to which GSK received a worldwide, exclusive license to develop and commercialize daplusiran/tomligisiran (GSK5637608, formerly JNJ-3989), the Company's third-generation subcutaneously administered RNAi therapeutic candidate being developed as a potential therapy for patients with chronic hepatitis B virus infection. GSK5637608 had previously been licensed to Janssen in October 2018.

Under the terms of the GSK-HBV Agreement, the Company received $2.7 million in December 2023, upon signing the amended GSK-HBV Agreement. The Company is eligible to receive up to $832.5 million in development and sales milestone payments under the GSK-HBV Agreement.

There were no contract assets and liabilities recorded as of June 30, 2024.

***Horizon Therapeutics Ireland DAC ("Horizon")***

In June 2021, Horizon and the Company entered into a collaboration and license agreement (the "Horizon License Agreement"). Under the terms of the Horizon License Agreement, Horizon received a worldwide exclusive license for HZN-457, a clinical-stage medicine being developed by Horizon as a potential treatment for people with uncontrolled gout.

At the inception of the Horizon License Agreement, the Company identified one distinct performance obligation. The Company determined that the key deliverables included the license and certain R&D services, including the Company's responsibilities to conduct all activities through the preclinical stages of development of HZN-457 (the "Horizon R&D Services"). The Company received a $40.0 million upfront payment in July 2021. Revenue was recognized on a straight-line basis over the timeframe for completing the Horizon R&D Services, concluding in the first quarter of 2023. Further, the Company received an additional $15.0 million upon Horizon's initiation of a Phase 1 clinical trial in January 2023.

On October 6, 2023, Amgen completed its acquisition of Horizon and subsequently notified the Company of Amgen's intent to terminate the HZN-457 license. Horizon exercised its right to terminate the Horizon License Agreement for convenience, which took effect on December 21, 2023.

***Takeda Pharmaceutical Company Limited ("Takeda")***

In October 2020, Takeda and the Company entered into an Exclusive License and Co-Funding Agreement (the "Takeda License Agreement"). Under the Takeda License Agreement, Takeda and the Company will co-develop the Company's fazirsiran program (formerly TAK-999 and ARO-AAT), the Company's second-generation subcutaneously administered RNAi therapeutic candidate being developed as a treatment for liver disease associated with alpha-1 antitrypsin deficiency. Within the United States, fazirsiran, if approved, will be co-commercialized under a 50/50 profit sharing structure. Outside the United States, Takeda received an exclusive license to commercialize fazirsiran and will lead the global commercialization strategy, while the Company will be eligible to receive tiered royalties of 20% to 25% on net

sales.

At the inception of the Takeda License Agreement, the Company identified one distinct performance obligation. The Company determined that the key deliverables included the license and certain R&D services including the Company's responsibilities to complete the initial portion of the SEQUOIA study, to complete the ongoing Phase 2 AROAAT2002 study and to ensure certain manufacturing of fazirsiran drug product is completed and delivered to Takeda (the "Takeda R&D Services"). Due to the specialized and unique nature of these Takeda R&D Services and their direct relationship with the license, the Company determined that these deliverables represent one distinct bundle and, thus, one performance obligation. Beyond the Takeda R&D Services, which are the responsibility of the Company, Takeda will be responsible for managing future clinical development and commercialization outside the United States. Within the United States, the Company will also participate in co-development and co-commercialization efforts and will co-fund these efforts with Takeda as part of the 50/50 profit sharing structure within the United States. The Company considers the collaborative activities, including the co-development and co-commercialization, to be a separate unit of account within Topic 808, and as such, these co-funding amounts are recorded as research and development expenses or general and administrative expenses, as appropriate.

Under the terms of the Takeda License Agreement, the Company received $300.0 million as an upfront payment in January 2021 and an additional $40.0 million upon Takeda's initiation of a Phase 3 REDWOOD clinical study of fazirsiran in March 2023, and is eligible to receive up to $527.5 million in additional potential development, regulatory and commercial milestones.

The Company allocated the total $300.0 million initial transaction price to its one distinct performance obligation for the fazirsiran license and the associated Takeda R&D Services. Revenue was recognized using the input method (based on actual patient visits completed versus total estimated visits completed for the ongoing SEQUOIA and AROAAT2002 clinical studies). The Phase 2 study visits for patients in the SEQUOIA and AROAAT2002 studies concluded by December 31, 2023, and the Company has substantially completed its performance obligation under the Takeda License Agreement. As such, all revenue has been fully recognized as of December 31, 2023. There were no further deferred revenue and contract liabilities as of June 30, 2024.

The Company recorded $21.3 million as accrued expenses as of June 30, 2024 that was primarily driven by co-development and co-commercialization activities.

***Janssen Pharmaceuticals, Inc. ("Janssen")***

On April 7, 2023, Janssen voluntarily terminated its collaboration agreement with the Company and the Company regained full rights to ARO-PNPLA3, formerly called JNJ-75220795. ARO-PNPLA3 is in Phase 1 clinical trials, which are now being developed by the Company.

Further, on December 11, 2023, the Company entered into the GSK-HBV Agreement, as discussed above, pursuant to which GSK received an exclusive license for daplusiran/tomligisiran (GSK5637608, formerly JNJ-3989). Daplusiran/tomligisiran had previously been licensed to Janssen in October 2018.

***Amgen Inc. ("Amgen")***

In September 2016, Amgen and the Company entered into two collaboration and license agreements and a common stock purchase agreement. Under the Second Collaboration and License Agreement (the "Olpasiran Agreement"), Amgen received a worldwide, exclusive license to the Company's novel RNAi olpasiran (previously referred to as AMG- 890 or ARO-LPA) program. These RNAi molecules are designed to reduce elevated lipoprotein(a), which is a genetically validated, independent risk factor for atherosclerotic cardiovascular disease. Under the Olpasiran Agreement, Amgen is wholly responsible for clinical development and commercialization.

Under the Olpasiran Agreement, the Company has received $35.0 million in upfront payments and $21.5 million in the form of an equity investment by Amgen in the Company's common stock. Further, the Company received an additional $55.0 million in milestone payments; $10.0 million upon Amgen's initiation of a Phase 1 study in September 2018, $20.0 million upon its initiation of a Phase 2 clinical study in July 2020, and $25.0 million upon its first subject enrollment in a Phase 3 trial in December 2022. The Company has substantially completed its performance obligations under the Olpasiran Agreement. There were no contract assets and liabilities recorded as of June 30, 2024.

In November 2022, Royalty Pharma Investments 2019 ICAV ("Royalty Pharma") and the Company entered into a Royalty Purchase Agreement with Royalty Pharma (the "Royalty Pharma Agreement"). In consideration for the payments under the Royalty Pharma Agreement, Royalty Pharma is entitled to receive all royalties otherwise payable by Amgen to the Company under the Olpasiran Agreement. The Company remains eligible to receive up to an additional $485.0 million in remaining development, regulatory and sales milestone payments payable from Amgen and Royalty Pharma. See Note

11.

***Visirna Therapeutics, Inc. ("Visirna")***

In April 2022, the Company and Visirna, its subsidiary, entered into a License Agreement (the "Visirna License Agreement"), pursuant to which Visirna received an exclusive license to develop, manufacture and commercialize four of the Company's RNAi-based investigational cardiometabolic medicines in Greater China (including the People's Republic of China, Hong Kong, Macau and Taiwan).

The Company also performs manufacturing and development work pursuant to a Clinical Supply Agreement between the parties contemplated by the Visirna License Agreement. The Company received $0.1 million and $0.9 million as consideration for this manufacturing and development work for the nine months ended June 30, 2024 and 2023, respectively. There were no contract assets and liabilities recorded as of June 30, 2024.

**NOTE 3. BALANCE SHEET ACCOUNTS**

***Property, Plant and Equipment***

The following table summarizes the Company's major classes of property, plant and equipment:

| | June 30, 2024 | September 30, 2023 |
|---|---|---|
| | (in thousands) | |
| Land | $ 2,996 | $ 2,996 |
| Building | 75,868 | — |
| Research equipment | 64,207 | 56,509 |
| Furniture | 5,593 | 1,540 |
| Computers and software | 976 | 700 |
| Leasehold improvements | 104,396 | 103,813 |
| Construction in progress | 175,778 | 166,655 |
| | 429,814 | 332,213 |
| Less: Accumulated depreciation and amortization | (53,903) | (41,951) |
| Property, plant and equipment, net | $ 375,911 | $ 290,262 |

Depreciation and amortization expense for property, plant and equipment for the three months ended June 30, 2024 and 2023 was $4.4 million and $2.9 million, respectively. Depreciation and amortization expense for property and equipment for the nine months ended June 30, 2024 and 2023 was $12.3 million and $7.4 million, respectively.

During the first quarter of fiscal 2024, the Company completed the build out of one of its laboratory and office facilities in Verona, Wisconsin, which resulted in the reclassification of $75.9 million from construction in progress to building as of June 30, 2024. Further, the Company commenced depreciation on the newly completed facility over a 39-year period.

***Accrued Expenses***

Accrued expenses consist of the following:

| | June 30, 2024 | September 30, 2023 |
|---|---|---|
| | (in thousands) | |
| Accrued R&D expenses | $ 17,911 | $ 16,125 |
| Accrued R&D expenses; co-development | 21,280 | 5,895 |
| Accrued capital expenditures | 6,909 | 14,044 |
| Other | 1,799 | 3,699 |
| Total accrued expenses | $ 47,899 | $ 39,763 |

**NOTE 4. INVESTMENTS**

The Company's investments consisted of the following:

| | As of June 30, 2024 (in thousands) | | | |
|---|---|---|---|---|
| | Adjusted Basis | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
| Available-for-sale securities | $ 367,862 | $ 8 | $ (598) | $ 367,272 |
| **Total current investments** | $ 367,862 | $ 8 | $ (598) | $ 367,272 |

| | As of September 30, 2023 (in thousands) | | | |
|---|---|---|---|---|
| | Adjusted Basis | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
| Available-for-sale securities | $ 295,699 | $ 3 | $ (2,967) | $ 292,735 |
| **Total current investments** | $ 295,699 | $ 3 | $ (2,967) | $ 292,735 |

The Company has determined that the available-for-sale securities that were in an unrealized loss position did not have any credit loss impairment as of June 30, 2024 and 2023.

**NOTE 5. INTANGIBLE ASSETS**

Intangible assets subject to amortization include patents and a license agreement capitalized as part of the Novartis RNAi asset acquisition in March 2015. The following table presents the components of intangible assets:

| | Gross Carrying Amount | Accumulated Amortization | Impairment | Net Carrying Amount | Useful Lives |
|---|---|---|---|---|---|
| | | (in thousands) | | | (in years) |
| **As of June 30, 2024** | | | | | |
| Patents | $ 21,728 | $ 14,485 | $ — | $ 7,243 | 14 |
| License | 3,129 | 1,385 | — | 1,744 | 21 |
| **Total intangible assets, net** | $ 24,857 | $ 15,870 | $ — | $ 8,987 | |
| **As of September 30, 2023** | | | | | |
| Patents | $ 21,728 | $ 13,321 | $ — | $ 8,407 | 14 |
| License | 3,129 | 1,274 | — | 1,855 | 21 |
| **Total intangible assets, net** | $ 24,857 | $ 14,595 | $ — | $ 10,262 | |

Intangible assets are reviewed annually for impairment and more frequently if potential impairment indicators exist. No impairment indicators were identified during the nine months ended June 30, 2024 and 2023.

Intangible assets with definite useful lives are amortized on a straight-line basis over their useful lives. Intangible assets amortization expense was $0.4 million for the three months ended June 30, 2024 and 2023, and $1.3 million for the nine months ended June 30, 2024 and 2023. None of the intangible assets with definite useful lives are anticipated to have a residual value.

The following table presents the estimated future amortization expense related to intangible assets as of June 30, 2024:

| Year Ending September 30, | Amortization Expense (in thousands) |
|---|---|
| 2024 (remainder) | $ 425 |
| 2025 | 1,700 |
| 2026 | 1,700 |
| 2027 | 1,700 |
| 2028 | 1,700 |
| Thereafter | 1,762 |
| **Total** | $ 8,987 |

**NOTE 6. STOCKHOLDERS' EQUITY**

The following table summarizes the Company's shares of common stock and preferred stock:

| | | | Shares | | |
|---|---|---|---|---|---|
| | Par Value | | Authorized | Issued | Outstanding |
| | | | | (in thousands) | |
| **As of June 30, 2024** | | | | | |
| Common stock | $ | 0.001 | 290,000 | 124,227 | 124,227 |
| Preferred stock | $ | 0.001 | 5,000 | — | — |
| **As of September 30, 2023** | | | | | |
| Common stock | $ | 0.001 | 290,000 | 107,312 | 107,312 |
| Preferred stock | $ | 0.001 | 5,000 | — | — |

As of June 30, 2024 and September 30, 2023, respectively, 11,608,148 and 12,709,837 shares of common stock were reserved for issuance upon exercise of options and vesting of restricted stock units granted or available for grant under the Company's 2013 and 2021 Incentive Plans, as well as for other inducement grants made to new employees under Rule 5635(c)(4) of the Nasdaq Listing Rules.

On January 2, 2024, the Company entered into an underwriting agreement with Jefferies LLC, BofA Securities, Inc., and Cowen and Company, LLC, as representatives of the several underwriters. The Company issued 15,790,000 shares of common stock at an offering price of $28.50 per share. The aggregate purchase price paid by investors was $450.0 million and the Company received net proceeds of $429.3 million after deducting advisory fees and offering expenses.

On December 2, 2022, the Company entered into an open market sale agreement (the "Open Market Sale Agreement"), pursuant to which the Company may, from time to time, sell up to $250,000,000 in shares of the Company's common stock through Jefferies LLC, acting as the sales agent and/or principal, in an at-the-market offering ("ATM Offering"). The Company is not required to sell shares under the Open Market Sale Agreement. The Company will pay Jefferies LLC a commission of up to 3.0% of the aggregate gross proceeds received from all sales of the common stock under the Open Market Sale Agreement. Unless otherwise terminated, the ATM Offering shall terminate upon the earlier of (i) the sale of all shares of common stock subject to the Open Market Sale Agreement and (ii) the termination of the Open Market Sale Agreement as permitted therein. The Company and Jefferies may each terminate the Open Market Sale Agreement at any time upon prior notice. As of June 30, 2024, no shares have been issued under the Open Market Sale Agreement.

**NOTE 7. COMMITMENTS AND CONTINGENCIES**

***Litigation***

From time to time, the Company may be subject to various claims and legal proceedings in the ordinary course of business. If the potential loss from any claim, asserted or unasserted, or legal proceeding is considered probable and the amount is reasonably estimable, the Company will accrue a liability for the estimated loss. There were no contingent liabilities recorded as of June 30, 2024.

***Commitments***

The Company owns land in the Verona Technology Park in Verona, Wisconsin, which is being developed into an approximately 160,000 square foot drug manufacturing facility and an approximately 140,000 square foot laboratory and office facility which will support the Company's manufacturing process development and analytical activities. During the first quarter of fiscal 2024, the Company completed the build out of one of its laboratory and office facilities.

As of June 30, 2024, the Company has incurred $266.0 million and intends to spend an additional $18.0 million to $32.0 million to complete the build out of the facilities.

**NOTE 8. LEASES**

**Pasadena, California**: The Company leases 49,000 square feet of office space located at 177 East Colorado Blvd. for its corporate headquarters from 177 Colorado Owner, LLC, which lease expires on April 30, 2027. The lease contains an option to renew for one additional five-year term. The Company is not reasonably certain that it will exercise this option to

renew and therefore it is not included in right-of-use assets and liabilities as of June 30, 2024.

**San Diego, California**: The Company leases 144,000 square feet of office and research and development laboratory space located at 10102 Hoyt Park from 11404 & 11408 Sorrento Valley Owner, LLC, which lease expires on April 30, 2038. Pursuant to the lease, within twelve months of the expiration of the initial 15-year term, the Company has the option to extend the lease for up to one additional ten-year term, with certain annual increases in base rent. The Company is not reasonably certain that it will exercise this option to renew and therefore it is not included in right-of-use assets and liabilities as of June 30, 2024.

The lease agreement grants the Company the right to receive an Additional Tenant Improvement Allowance ("ATIA") funded by the lessor, with a maximum amount of $7.2 million, subject to a 7% interest per annum over the base term. Further, on September 25, 2023, the Company executed the first amendment to the lease, which grants a second ATIA with a maximum amount of $23.6 million, bearing interest at a rate of 9% per annum over the base term. The Company received $30.8 million ATIA from the lessor during the first quarter of fiscal 2024. As a result, the Company remeasured its lease liability and right-of-use assets to reflect these additional allowances and the related increased lease payments. The Company has further concluded that these ATIAs have no effects on the classification of the lease.

The Company previously subleased additional research and development space in San Diego, California, which sublease ended during the fiscal year of 2023.

**Madison, Wisconsin**: The Company leases 115,000 square feet space located at 502 South Rosa Road for its office and laboratory facilities, which lease expires on September 30, 2031. The lease contains options to renew for two terms of five years. The Company is not reasonably certain that it will exercise this option and therefore it is not included in right-of-use assets and liabilities as of June 30, 2024.

The components of lease assets and liabilities along with their classification on the Company's consolidated balance sheets were as follows:

| Lease Assets and Liabilities | Classification | June 30, 2024 | September 30, 2023 |
|---|---|---|---|
| | | (in thousands) | |
| Operating lease assets | Right-of-use assets | $ 44,339 | $ 45,297 |
| Current operating lease liabilities | Lease liabilities | 6,053 | 10,563 |
| Non-current operating lease liabilities | Lease liabilities, net of current portion | 112,040 | 104,608 |

| | | Three Months Ended June 30, | | Nine Months Ended June 30, | |
|---|---|---|---|---|---|
| Lease Cost | Classification | 2024 | 2023 | 2024 | 2023 |
| | | (in thousands) | | | |
| Operating lease cost | Research and development | $ 2,965 | $ 3,323 | $ 8,531 | $ 7,735 |
| | General and administrative expense | 537 | 509 | 1,504 | 1,542 |
| Variable lease cost [1] | Research and development | 863 | 257 | 2,478 | 627 |
| | General and administrative expense | — | — | — | — |
| Total | | $ 4,365 | $ 4,089 | $ 12,513 | $ 9,904 |

*(1) Variable lease cost is primarily related to operating expenses associated with the Company's operating leases.*

There was no short-term lease cost during the nine months ended June 30, 2024. There was $0.6 million and $1.2 million short-term lease cost during the three and nine months ended June 30, 2023, respectively.

The following table presents maturities of operating lease liabilities on an undiscounted basis as of June 30, 2024:

| Year | Amounts (in thousands) |
|---|---|
| 2024 (remainder of fiscal year) | $ 3,793 |
| 2025 | 15,356 |
| 2026 | 15,696 |
| 2027 | 14,869 |
| 2028 | 13,511 |
| 2029 and thereafter | 128,356 |
| Total | $ 191,581 |
| Less imputed interest | $ (73,488) |
| Total operating lease liabilities (includes current portion) | $ 118,093 |

Supplemental cash flow and other information related to leases was as follows:

| | Three Months Ended June 30, | | Nine Months Ended June 30, | |
|---|---|---|---|---|
| | 2024 | 2023 | 2024 | 2023 |
| | (in thousands) | | | |
| Cash received for amounts included in the measurement of lease liabilities: | | | | |
| Operating cash flows from operating leases | $ — | $ 5,414 | $ 3,099 | $ 23,343 |
| Right-of-use assets adjusted in exchange for new/amended operating lease liabilities | $ — | $ 3,519 | $ (64) | $ (19,063) |
| Cash paid for amounts included in the measurement of lease liabilities: | | | | |
| Operating cash flows from operating leases | $ 3,204 | $ 1,885 | $ 7,221 | $ 4,081 |

| | June 30, | |
|---|---|---|
| | 2024 | 2023 |
| Weighted-average remaining lease term (in years) | 12.8 | 13.4 |
| Weighted-average discount rate | 8.0 % | 8.0 % |

**NOTE 9. STOCK-BASED COMPENSATION**

***Stock Plans***

The Company has two plans that provide for equity-based compensation under the 2013 and the 2021 plans. Under the 2013 Incentive Plan (the "2013 Plan"), 2,924,586 shares of the Company's common stock are reserved for grants of stock options and restricted stock awards to employees and directors as of June 30, 2024.

Under the 2021 Incentive Plan (the "2021 Plan"), 8,000,000 shares (subject to certain adjustments) of the Company's common stock are reserved for grants of stock options, stock appreciation rights, restricted and unrestricted stock, performance awards, cash awards and other awards convertible into or otherwise based on shares of the Company's common stock. The maximum number of shares authorized under the 2021 Plan will be (i) reduced by any shares subject to awards made under the 2013 Plan after January 1, 2021, and (ii) increased by any shares subject to outstanding awards under the 2013 Plan as of January 1, 2021 that, after January 1, 2021, are canceled, expired, forfeited or otherwise not issued under such awards (other than as a result of being tendered or withheld to pay the exercise price or withholding taxes in connection with any such awards) or settled in cash. As of June 30, 2024, the total number of shares available for issuance was 4,565,727 shares, which includes 158,928 and 154,139 shares that were forfeited under the 2013 and 2021 Plans, respectively, and 3,697,189 shares have been granted under the 2021 Plan.

In addition, there were 665,020 shares reserved for options and 616,638 shares reserved for restricted stock units issued as inducement grants to new employees granted outside of the Company's equity-based compensation plans under Rule 5635(c)(4) of the Nasdaq Listing Rules.

The following table presents a summary of awards outstanding:

| | As of June 30, 2024 | | | |
|---|---|---|---|---|
| | 2013 Plan | 2021 Plan | Inducement Awards | Total |
| **Granted and outstanding awards:** | | | | |
| Options | 1,315,326 | 32,151 | 665,020 | 2,012,49 |
| Restricted stock units | 1,609,260 | 2,804,026 | 616,638 | 5,029,92 |
| **Total** | 2,924,586 | 2,836,177 | 1,281,658 | 7,042,42 |

The following table summarizes stock-based compensation expenses included in operating expenses:

| | Three Months Ended June 30, | | Nine Months Ended June 30, | |
|---|---|---|---|---|
| | 2024 | 2023 | 2024 | 2023 |
| Research and development | $ 6,221 | $ 8,982 | $ 21,634 | $ 2 |
| General and administrative | 8,490 | 10,965 | 27,350 | 3 |
| Total | $ 14,711 | $ 19,947 | $ 48,984 | $ 5 |

***Stock Option Awards***

The following table presents a summary of the stock option activity for the nine months ended June 30, 2024:

| | Shares | Weighted-Average Exercise Price Per Share | Weighted-Average Remaining Contractual Term (Years) | Aggregate Intrinsic Value |
|---|---|---|---|---|
| Outstanding at September 30, 2023 | 2,263,477 | $ 22.68 | | |
| Granted | — | — | | |
| Cancelled or expired | (53,582) | 36.62 | | |
| Exercised | (197,398) | 10.98 | | |
| Outstanding at June 30, 2024 | 2,012,497 | $ 23.22 | 3.8 | $ 22,486,304 |
| Exercisable at June 30, 2024 | 2,001,968 | $ 23.05 | 3.8 | $ 22,486,304 |

The aggregate intrinsic values represent the amount by which the market price of the underlying stock exceeds the

exercise price of the option. The total intrinsic value of the options exercised during the three months ended June 30, 2024 and 2023 was $0.7 million and $6.5 million, respectively. The total intrinsic value of the options exercised during the nine months ended June 30, 2024 and 2023 was $3.8 million and $10.1 million, respectively.

Stock-based compensation expense related to stock options outstanding for the three months ended June 30, 2024 and 2023, was $0.4 million and $2.1 million, respectively. Stock-based compensation expense related to stock options outstanding for the nine months ended June 30, 2024 and 2023, was $2.5 million and $6.7 million, respectively.

As of June 30, 2024, the pre-tax compensation expense for all outstanding unvested stock options in the amount of $0.4 million will be recognized in the Company's results of operations over a weighted average period of 3 months.

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 pricing 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, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

The following table provides the assumptions used in the calculation of grant-date fair values of these stock options based on the Black-Scholes option pricing model:

| | Nine Months Ended June 30, | |
|---|---|---|
| | 2024[5] | 2023 |
| Expected dividend yield[1] | N/A | — |
| Risk-free interest rate[2] | N/A | 3.69% |
| Expected volatility[3] | N/A | 86.4% |
| Expected term (in years)[4] | N/A | 6.25 |
| Weighted average grant date fair value per share of options granted | N/A | $24.80 |

*(1) The dividend yield is zero as the Company currently does not pay a dividend.*
*(2) The risk-free interest rate is based on that of the U.S. Treasury yields with equivalent terms in effect at the time of the grant.*
*(3) Volatility is estimated based on volatility average of the Company's common stock price.*
*(4) The computation of expected term was determined based on safe harbor rules, considering the contractual terms of the awards and vesting schedules.*
*(5) No options were granted during the nine months ended June 30, 2024.*

**Visirna ESOP**: On October 1, 2023, Visirna, a subsidiary of the Company, granted 7,500,000 stock options to its employees from the Employee Stock Option Plan (the "Visirna ESOP"), which authorizes 20,000,000 shares for issuance. The Visirna ESOP is independently managed by Visirna, including the valuation process. For the three and nine months ended June 30, 2024, stock-based compensation expense related to the Visirna ESOP was $2.3 million and $5.5 million, respectively.

***Restricted Stock Units***

Restricted Stock Units ("RSUs"), including market-based, time-based and performance-based awards, have been granted under the Company's 2013 and 2021 Plans and as inducements grants granted outside of the Company's equity-based compensation plans. At vesting, each outstanding RSU will be exchanged for one share of the Company's common stock. RSU awards generally vest subject to the satisfaction of service requirements or the satisfaction of both service requirements and achievement of certain performance targets.

The following table summarizes the activity of the Company's RSUs:

| | Number of RSUs | Weighted-Average Grant Date Fair Value Per Share |
|---|---|---|
| Outstanding at September 30, 2023 | 4,241,640 | $ 58.43 |
| Granted | 1,876,825 | 30.67 |
| Vested | (927,766) | 53.16 |
| Forfeited | (160,775) | 41.75 |
| Outstanding at June 30, 2024 | 5,029,924 | $ 49.58 |

The fair value of RSUs was determined based on the closing price of the Company's common stock on the grant date, with consideration given to the probability of achieving service and/or performance conditions for awards.

For the three months ended June 30, 2024 and 2023, the Company recorded $14.3 million and $17.8 million of expense related to RSUs, respectively. For the nine months ended June 30, 2024 and 2023, the Company recorded $46.5 million and $53.2 million of expense related to RSUs, respectively. As of June 30, 2024, there was $96.3 million of total unrecognized compensation cost related to RSUs that is expected to be recognized over a weighted-average period of 1.6 years.

**NOTE 10. FAIR VALUE MEASUREMENTS**

The Company employs a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The Company's valuation techniques and inputs used to measure fair value and the definition of the three levels (Level 1, Level 2, and Level 3) of the fair value hierarchy are disclosed in Note 10 - Fair Value Measurements of Notes to Consolidated Financial Statements of Part IV, "Item 15. Exhibits and Financial Statement Schedules" of its Annual Report on Form 10-K for the year ended September 30, 2023.

The Company uses prices and inputs that are current as of the measurement date, including during periods of market disruption. In periods of market disruption, the ability to observe prices and inputs may be reduced for many instruments. This condition could cause an instrument to be reclassified from Level 1 to Level 2, or from Level 2 to Level 3. The Company recognizes transfers between levels at either the actual date of the event or a change in circumstances that caused the transfer. At June 30, 2024 and September 30, 2023, the Company did not have any financial assets or financial liabilities based on Level 3 measurements.

The following table presents information about the Company's assets and liabilities measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques utilized by the Company:

| | June 30, 2024 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| | (in thousands) | | | |
| **Available-for-sale securities** | | | | |
| U.S. government bonds | $ — | $ 80,946 | $ — | $ 80,946 |
| Commercial notes | — | 114,616 | — | 114,616 |
| Corporate debt securities | — | 171,710 | — | 171,710 |
| **Total available-for-sale securities** | — | 367,272 | — | 367,272 |
| **Cash equivalents** | | | | |
| Money market instruments | 29,495 | — | — | 29,495 |
| Commercial notes | — | 4,986 | — | 4,986 |
| **Total cash equivalents** | 29,495 | 4,986 | — | 34,481 |
| **Total financial assets** | $ 29,495 | $ 372,258 | $ — | $ 401,753 |

| | September 30, 2023 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| | (in thousands) | | | |
| **Available-for-sale securities** | | | | |
| U.S. government bonds | $ 31,553 | $ — | $ — | $ 31,553 |
| Municipal securities | — | 7,093 | — | 7,093 |
| Commercial notes | — | 22,205 | — | 22,205 |
| Corporate debt securities | — | 231,884 | — | 231,884 |
| **Total available-for-sale securities** | 31,553 | 261,182 | — | 292,735 |
| **Cash equivalents** | | | | |
| Money market instruments | 39,733 | — | — | 39,733 |
| **Total cash equivalents** | 39,733 | — | — | 39,733 |
| **Total financial assets** | $ 71,286 | $ 261,182 | $ — | $ 332,468 |

**NOTE 11. LIABILITY RELATED TO THE SALE OF FUTURE ROYALTIES**

In November 2022, the Company and Royalty Pharma entered into the Royalty Pharma Agreement, pursuant to which Royalty Pharma agreed to pay up to $410.0 million in cash to the Company in consideration for the Company's future royalty interest in olpasiran, a siRNA originally developed by the Company and licensed to Amgen in September 2016 under the Olpasiran Agreement.

Pursuant to the Royalty Pharma Agreement, Royalty Pharma paid $250.0 million upfront and agreed to pay up to an

additional $160.0 million in aggregate one-time milestone payments due if and when the following milestone events occur: (i) $50.0 million on completion of enrollment in the OCEAN Phase 3 clinical trial for olpasiran, (ii) $50.0 million upon receipt of FDA approval of olpasiran for an approved indication (reduction in the risk of myocardial infarction, urgent coronary revascularization, or coronary heart disease death in adults with established cardiovascular disease and elevated Lp(a)), and (iii) $60.0 million upon Royalty Pharma's receipt of at least $70.0 million of royalty payments under the Royalty Pharma Agreement in any single calendar year. During the third quarter of fiscal 2024, Amgen completed enrollment of the Phase 3 OCEAN(a) outcomes trial of olpasiran, which triggered a $50.0 million milestone payment that the Company received in the same quarter.

In consideration for the payment of the foregoing amounts under the Royalty Pharma Agreement, Royalty Pharma is entitled to receive all royalties otherwise payable by Amgen to the Company under the Olpasiran Agreement. The Company remains eligible to receive any milestone payments potentially payable by Amgen under the Olpasiran Agreement.

The Company has evaluated the terms of the Royalty Pharma Agreement and concluded, in accordance with the relevant accounting guidance, that the Company accounted for the transaction as debt and the funding of $250.0 million and $50.0 million from Royalty Pharma were recorded as liabilities related to the sale of future royalties on its consolidated balance sheets. The Company is not obligated to repay these funds received under the Royalty Pharma Agreement.

The Company records the obligations at their carrying value using the effective interest method. In order to amortize the sale of future royalties, the Company utilizes the prospective method to estimate the future royalties to be paid by the Company to the counterparty over the life of the arrangement. Under the prospective method, a new effective interest rate is determined based on the revised estimate of remaining cash flows. The new rate is the discount rate that equates the present value of the revised estimate of remaining cash flows with the carrying amount of the debt, and it will be used to recognize non-cash interest expense for the remaining periods. The Company periodically assesses the amount and the timing of expected royalty payments using a combination of internal projections and forecasts from external sources. The estimates of future net product sales (and resulting royalty payments) are based on key assumptions including population, penetration, probability of success and sales price, among others. To the extent such payments are greater or less than the Company's initial estimates or the timing of such payments is different than its original estimates, the Company will prospectively adjust the amortization of the royalty financing obligations and the effective interest rate. As of June 30, 2024, the estimated effective interest rate was 6.3%.

The following table presents the activity with respect to the liability related to the sale of future royalties.

| | Carrying Amount (in thousands) |
|---|---|
| Carrying value as of September 30, 2023 | $ 268,326 |
| Milestone payment received | 50,000 |
| Non-cash interest expense recognized | 17,705 |
| Carrying value as of June 30, 2024 | $ 336,031 |

**NOTE 12. NET LOSS PER SHARE**

The following table presents the computation of basic and diluted net loss per share for the three and nine months ended June 30, 2024 and 2023.

| | Three Months Ended June 30, | | Nine Months Ended June 30, | |
|---|---|---|---|---|
| | 2024 | 2023 | 2024 | 2023 |
| | (in thousands, except per share amounts) | | | |
| **Numerator:** | | | | |
| Net loss attributable to Arrowhead Pharmaceuticals, Inc. | $ (170,793) | $ (102,946) | $ (428,957) | $ (95,596) |
| | | | | |
| **Denominator:** | | | | |
| Weighted-average basic shares outstanding | 124,199 | 107,004 | 118,260 | 106,597 |
| Effect of dilutive securities | — | — | — | — |
| Weighted-average diluted shares outstanding | 124,199 | 107,004 | 118,260 | 106,597 |
| | | | | |
| Basic net loss per share | $ (1.38) | $ (0.96) | $ (3.63) | $ (0.90) |
| Diluted net loss per share | $ (1.38) | $ (0.96) | $ (3.63) | $ (0.90) |

The following table sets forth the potentially dilutive securities that have been excluded from the calculation of diluted net loss per share because to include them would be anti-dilutive.

| | Three Months Ended June 30, | | Nine Months Ended June 30, | |
|---|---|---|---|---|
| | 2024 | 2023 | 2024 | 2023 |
| | (in thousands) | | | |
| Options | 753 | 637 | 711 | 768 |
| Restricted stock units | 3,976 | 2,830 | 4,060 | 3,256 |
| Total | 4,729 | 3,467 | 4,771 | 4,024 |

## NOTE 13. SUBSEQUENT EVENTS

***Financing Agreement***

On August 7, 2024 (the "Closing Date"), the Company entered into a financing agreement (the "Financing Agreement") with the guarantors party thereto, the lenders party thereto (the "Lenders"), and Sixth Street Lending Partners, as the administrative agent and collateral agent for the Lenders. The Financing Agreement provides for a senior secured term loan facility of $500.0 million (the "Credit Facility"), which includes $400.0 million funded on the Closing Date with an additional $100.0 million at the Company's option, subject to mutual agreement between Sixth Street and the Company, during the seven-year term of the agreement. The Credit Facility matures on August 7, 2031 (the "Maturity Date") and bears interest at an annual rate equal to 15.0%. The Credit Facility does not provide for scheduled amortization payments during the term, and all principal will be due on the Maturity Date. The Company has the right to prepay loans under the Financing Agreement at any time. See Item 5. Other Information of Part II, for more information.

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

### FORWARD-LOOKING STATEMENTS

*This Quarterly Report on Form 10-Q contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, 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," "goal," "endeavor," "strive," "intend," "plan," "project," "could," "estimate," "target," "forecast" or "continue" or the negative of these words 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 business, or other characterizations of future events or circumstances are forward-looking statements. These forward-looking statements include, but are not limited to, statements about the initiation, timing, progress and results of our preclinical studies and clinical trials, including any commercialization efforts, our research and development programs, and our "20 in 25" pipeline goal; our expectations regarding the potential benefits of the partnership, licensing and/or collaboration arrangements and other strategic arrangements and transactions we have entered into or may enter into in the future; our beliefs and expectations regarding the amount and timing of future milestone, royalty or other payments that could be due to or from third parties under existing agreements; and our estimates regarding future revenues, research and development expenses, capital requirements and payments to third parties.*

*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 and timing of certain events may differ materially from the results discussed, projected, anticipated or indicated in any forward-looking statements. Forward-looking statements are not guarantees of future performance and our actual results of operations, financial condition and cash flows may differ materially. Factors that may cause or contribute to such differences include, but are not limited to, those discussed in more detail in "Item 1. Business" and "Item 1A. Risk Factors" of Part I and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of Part II of our most recent Annual Report on Form 10-K. Readers should carefully review these risks, as well as the additional risks described in other documents we file from time to time with the Securities and Exchange Commission (the "SEC"). 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. Statements made herein are as of the date of the filing of this Quarterly Report on Form 10-Q with the SEC and should not be relied upon as of any subsequent date. 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

The Company develops medicines that treat intractable diseases by silencing the genes that cause them. Using a broad portfolio of RNA chemistries and efficient modes of delivery, the Company's therapies trigger the RNAi interference mechanism to induce rapid, deep and durable knockdown of target genes. RNAi is a mechanism present in living cells that inhibits the expression of a specific gene, thereby affecting the production of a specific protein. RNAi-based therapeutics may leverage this natural pathway of gene silencing to target and shut down specific disease-causing genes.

The Company has focused its resources on therapeutics that exclusively utilize its high levels of pharmacologic activity in multiple animal models spanning several therapeutic areas. The Company believes that TRiM™ enabled therapeutics offer several potential advantages over prior generation and competing technologies, including: simplified manufacturing and reduced costs; multiple routes of administration including subcutaneous injection and inhaled administration; the ability to target multiple tissue types including liver, lung, CNS, muscle and adipose tissue; and the potential for improved safety and reduced risk of intracellular buildup, because there are fewer metabolites from smaller, simpler molecules.

The Company's clinical pipeline includes:

- Hypertriglyceridemia - plozasiran (formerly ARO-APOC3);
- Dyslipidemia - zodasiran (formerly ARO-ANG3);
- Cardiovascular disease - olpasiran (formerly AMG 890 or ARO-LPA, out-licensed to Amgen);

- Muco-obstructive or inflammatory pulmonary conditions - ARO-MUC5AC and ARO-RAGE;
- Idiopathic pulmonary fibrosis - ARO-MMP7;
- Non-alcoholic steatohepatitis (NASH) - GSK-4532990 (formerly ARO-HSD, out-licensed to GSK);
- Alpha-1 antitrypsin deficiency (AATD) - fazirsiran (formerly ARO-AAT, a collaboration with Takeda);
- Chronic hepatitis B virus - daplusiran/tomligisiran (GSK5637608, formerly JNJ-3989, out-licensed to GSK);
- Complement mediated diseases - ARO-C3;
- Non-alcoholic steatohepatitis (NASH) - ARO-PNPLA3 (formerly JNJ-75220795 or ARO-JNJ1);
- Facioscapulohumeral muscular dystrophy - ARO-DUX4;
- Dystrophia myotonica protein kinase (DMPK) - ARO-DM1; and
- Hepatic expression of complement factor B (CFB) - ARO-CFB.

The Company operates lab facilities in California and Wisconsin, where its research and development activities, including the development of RNAi therapeutics, take place. The Company's principal executive offices are located in Pasadena, California.

The Company continues to develop other clinical candidates for future clinical trials. Clinical candidates are tested internally and through Good Laboratory Practice (GLP) toxicology studies at outside laboratories. Drug materials for such studies and clinical trials are either manufactured internally or contracted to third-party manufacturers. The Company engages third-party contract research organizations (CROs) to manage clinical trials and works cooperatively with such organizations on all aspects of clinical trial management, including plan design, patient recruiting, and follow up. These outside costs, including toxicology/efficacy testing and manufacturing costs, as well as the preparation for and administration of clinical trials, are referred to as "candidate costs." As clinical candidates progress through clinical development, candidate costs will increase.

***The First Three Quarters of Fiscal 2024 Business Highlights***

Key recent developments through the first three quarters of fiscal 2024 included the following:

- Announced plans to advance investigational plozasiran into a Phase 3 cardiovascular outcomes trial called CAPITAN, which is designed to enroll patients with mixed hyperlipidemia and residual risk of atherosclerotic cardiovascular disease;
- Announced successful top-line results from the pivotal Phase 3 PALISADE study of investigational plozasiran in patients with familial chylomicronemia syndrome (FCS). The Company highlighted recent data for its cardiometabolic pipeline at its June 25, 2024, Cardiometabolic event;
- Presented preclinical data on ARO-INHBE for the treatment of obesity and metabolic diseases at the American Diabetes Association 84$^{th}$ Scientific Sessions. INHBE small interfering RNA (siRNA) administration resulted in multiple promising findings including: (1) 95% reduction in INHBE mRNA expression, (2) 19% suppression of body weight compared to saline controls, (3) 26% loss of fat mass, and (4) preservation of lean mass;
- Announced results from the Phase 2b double blind, randomized ARCHES-2 study of investigational zodasiran in patients with mixed hyperlipidemia;
- Announced that new interim clinical data on ARO-RAGE achieves high level of gene knockdown in patients with asthma;
- Completed enrollment in Amgen's Phase 3 OCEAN(a) - outcome trial of olpasiran, triggering a $50.0 million milestone payment to the Company, which was paid in the third quarter of fiscal 2024;
- Presented final data from the double-blind treatment period of the Company's Phase 2 SHASTA-2 study of investigational plozasiran in patients with severe Hypertriglyceridemia. Results from the SHASTA-2 study showed dramatic, consistent, and sustained reductions in Apolipoprotein C-III (APOC3) and triglycerides and improvement in multiple atherogenic lipoprotein levels;
- Announced an Expanded Access Program ("EAP") to make investigational plozasiran available outside of a clinical trial for qualifying patients with familial chylomicronemia syndrome (FCS);
- Initiated a Phase 1/2a clinical trial of ARO-DM1, being developed as a potential treatment for type 1 myotonic dystrophy (DM1), the most common adult-onset muscular dystrophy;
- Filed an application for clearance to initiate a Phase 1/2a clinical trial of ARO-CFB, being developed as a potential treatment for complement mediated renal disease;

- Entered into an underwriting agreement with Jefferies LLC, BofA Securities, Inc., and Cowen and Company, LLC, as representatives of the several underwriters. The Company issued 15,790,000 shares of common stock at a price of $28.50 per share. The aggregate purchase price paid by investors was $450.0 million and the Company received net proceeds of $429.3 million after deducting advisory fees and offering expenses; and
- Entered into an Amended and Restated License Agreement with GSK, pursuant to which GSK received a worldwide, exclusive license to develop and commercialize daplusiran/tomligisiran (GSK5637608, formerly JNJ-3989). Daplusiran/tomligisiran had previously been licensed to Janssen Pharmaceuticals, Inc. See Note 2 - Collaboration and License Agreements to Consolidated Financial Statements of Part I, "Item 1. Financial Statements."

Net loss attributable to Arrowhead Pharmaceuticals, Inc. was $170.8 million and $102.9 million for the three months ended June 30, 2024 and 2023, respectively. Net loss attributable to Arrowhead Pharmaceuticals, Inc. was $429.0 million and $95.6 million for the nine months ended June 30, 2024 and 2023, respectively. Net loss per share – diluted was $1.38 and $0.96 for the three months ended June 30, 2024 and 2023, respectively. Net loss per share – diluted was $3.63 and $0.90 for the nine months ended June 30, 2024 and 2023, respectively.

The changes in net loss attributable to the Company for the three and nine months ended June 30, 2024 were mainly due to a decrease in revenue from the Company's license and collaboration agreements, in conjunction with increased research and development expenses, which have continued to increase as the Company's pipeline of candidates has expanded and progressed through clinical trial phases.

The Company had $69.4 million of cash, cash equivalents and restricted cash, $367.3 million in available-for-sale securities, and $883.8 million of total assets as of June 30, 2024, as compared to $110.9 million of cash, cash equivalents and restricted cash, $292.7 million in available-for-sale securities and $765.6 million of total assets as of September 30, 2023. Based upon the Company's current cash and investment resources and operating plan, the Company expects to have sufficient liquidity to fund operations for at least the next twelve months from the date of the issuance of these financial statements.

***Critical Accounting Estimates***

There have been no significant changes to the Company's critical accounting estimates disclosed in the most recent Annual Report on Form 10-K for the fiscal year ended September 30, 2023.

## RESULTS OF OPERATIONS

The following data summarizes the Company's results of operations for the following periods indicated:

| | Three Months Ended June 30, | | Nine Months Ended June 30, | |
|---|---|---|---|---|
| | 2024 | 2023 | 2024 | 2023 |
| | (in thousands, except per share amounts) | | | |
| Revenue | $ — | $ 15,825 | $ 3,551 | $ 224,638 |
| Operating loss | $ (176,141) | $ (102,703) | $ (438,877) | $ (96,672) |
| Net loss attributable to Arrowhead Pharmaceuticals, Inc. | $ (170,793) | $ (102,946) | $ (428,957) | $ (95,596) |
| Net loss per share-diluted | $ (1.38) | $ (0.96) | $ (3.63) | $ (0.90) |

**Revenue**

Total revenue for the three months ended June 30, 2024 decreased by $15.8 million or 100.0% from the same period of 2023. Total revenue for the nine months ended June 30, 2024 decreased by $221.1 million, or 98.4% from the same period of 2023. The changes were primarily driven by decreased revenue recognition associated with the Company's license and collaboration agreements during the nine months ended June 30, 2024. The revenue for the nine months ended June 30, 2023 was mainly driven by the revenue recognition associated with Takeda, GSK, and Horizon/Amgen license agreements, as discussed below.

The Company has evaluated each agreement in accordance with FASB Topic 808–*Collaborative Arrangements* and Topic 606-*Revenue for Contracts from Customers*. See Note 2 — Collaboration and License Agreements to Consolidated Financial Statements of Part I, "Item 1. Financial Statements" for more information on revenue recognized under the collaboration and license agreements.

**Takeda**: In October 2020, Takeda and the Company entered into the Takeda License Agreement. The Company has allocated the total $300.0 million initial transaction price to its one distinct performance obligation for the fazirsiran license and the associated Takeda R&D Services. Revenue was recognized using the input method (based on actual patient visits completed versus total estimated visits completed for the ongoing SEQUOIA and AROAAT2002 clinical studies). The Phase 2 study visits for patients in the SEQUOIA and AROAAT2002 studies concluded by December 31, 2023, and the Company has substantially completed its performance obligation under the Takeda License Agreement. As such, all revenue has been fully recognized as of December 31, 2023.

During the nine months ended June 30, 2023, the Company recorded $146.5 million revenue, including a $40.0 million milestone payment by dosing the first patient in the Phase 3 REDWOOD clinical study of fazirsiran.

**GSK**: On December 11, 2023, GSK and the Company entered into the GSK-HBV Agreement. Under the GSK-HBV Agreement, GSK received a worldwide, exclusive license to develop and commercialize daplusiran/tomligisiran (GSK5637608, formerly JNJ-3989). Daplusiran/tomligisiran had previously been licensed to Janssen in October 2018. Under the terms of the GSK-HBV Agreement, the Company received $2.7 million in December 2023, upon signing the GSK-HBV Agreement.

During the nine months ended June 30, 2023, the Company recorded a $30.0 million milestone payment by dosing the first patient in a Phase 2b trial under GSK-HSD License Agreement.

**Horizon/Amgen**: During the nine months ended June 30, 2023, the Company recorded $6.7 million revenue of the total $40.0 million upfront payment received in July 2021, which was recognized on a straight-line basis over the timeframe for completing the Horizon R&D Services, concluding in the first quarter of 2023. There was also $1.5 million of reimbursable costs. Horizon enrolled the first subject in December 2022 in a Phase 1 randomized, placebo-controlled trial to assess the safety, tolerability, pharmacokinetics and pharmacodynamics of HZN-457, triggering a $15.0 million milestone payment to the Company which was paid in the second quarter of fiscal 2023. Further, Amgen enrolled the first subject in its Phase 3 trial of olpasiran, which triggered a $25.0 million milestone payment to the Company which was paid in the second quarter of fiscal 2023. On October 6, 2023, Amgen Inc. completed its acquisition of Horizon and subsequently notified the Company of Amgen's intent to terminate the HZN-457 license. Horizon exercised its right to terminate the Horizon License Agreement for convenience, which took effect on December 21, 2023.

**Operating Expenses**

The analysis below details the operating expenses and discusses the expenditures of the Company within the major expense categories. For purposes of comparison, the amounts for the three and nine months ended June 30, 2024 and 2023 are shown in the tables below.

***Research and Development (R&D) Expenses***

R&D expenses are related to the Company's research and development discovery efforts and related candidate costs, which are comprised primarily of outsourced costs related to the manufacturing of clinical supplies, toxicity/efficacy studies and clinical trial expenses. Internal costs primarily relate to discovery operations at the Company's research facilities in California and Wisconsin, including facility costs and laboratory-related expenses. The Company does not separately track R&D expenses by individual research and development project, or by individual drug candidate. The Company operates in a cross-functional manner across projects and does not separately allocate facilities-related costs, candidate costs, discovery costs, compensation expenses, depreciation and amortization expenses, and other expenses related to research and development activities.

The following table provides details of research and development expenses for the periods indicated:

| *(in thousands)* | Three Months Ended June 30, 2024 | % of Expense Category | Three Months Ended June 30, 2023 | % of Expense Category | Increase (Decrease) $ | Increase (Decrease) % |
|---|---|---|---|---|---|---|
| Candidate costs | $ 78,367 | 51 % | $ 41,209 | 44 % | $ 37,158 | 90 % |
| R&D discovery costs | 30,890 | 20 % | 20,253 | 21 % | 10,637 | 53 % |
| Salaries | 24,532 | 16 % | 16,632 | 18 % | 7,900 | 47 % |
| Facilities related | 7,132 | 5 % | 4,810 | 5 % | 2,322 | 48 % |
| Total research and development expense, excluding non-cash expense | $ 140,921 | 92 % | $ 82,904 | 88 % | $ 58,017 | 70 % |
| Stock compensation | 7,241 | 5 % | 8,982 | 9 % | (1,741) | (19)% |
| Depreciation and amortization | 4,269 | 3 % | 2,871 | 3 % | 1,398 | 49 % |
| Total research and development expense | $ 152,431 | 100 % | $ 94,757 | 100 % | $ 57,674 | 61 % |

| *(in thousands)* | Nine Months Ended June 30, 2024 | % of Expense Category | Nine Months Ended June 30, 2023 | % of Expense Category | Increase (Decrease) $ | Increase (Decrease) % |
|---|---|---|---|---|---|---|
| Candidate costs | $ 157,546 | 43 % | $ 110,079 | 43 % | $ 47,467 | 43 % |
| R&D discovery costs | 84,898 | 23 % | 50,377 | 20 % | 34,521 | 69 % |
| Salaries | 72,048 | 19 % | 47,725 | 19 % | 24,323 | 51 % |
| Facilities related | 19,597 | 5 % | 11,601 | 5 % | 7,996 | 69 % |
| Total research and development expense, excluding non-cash expense | $ 334,089 | 90 % | $ 219,782 | 87 % | $ 114,307 | 52 % |
| Stock compensation | 23,735 | 7 % | 26,129 | 10 % | (2,394) | (9)% |
| Depreciation/amortization | 12,220 | 3 % | 7,422 | 3 % | 4,798 | 65 % |
| Total research and development expense | $ 370,044 | 100 % | $ 253,333 | 100 % | $ 116,711 | 46 % |

Candidate costs increased $37.2 million, or 90%, for the three months ended June 30, 2024 and $47.5 million, or 43%, for the nine months ended June 30, 2024 compared to the same period of 2023. This increase was primarily due to the additional progression of the Company's pipeline of candidates into and through clinical trials, which resulted in higher manufacturing, outsourced clinical trial, and toxicity study costs.

R&D discovery costs increased $10.6 million, or 53%, for the three months ended June 30, 2024 and $34.5 million, or 69%, for the nine months ended June 30, 2024 compared to the same period of 2023. This increase was primarily driven by the growth of the Company's discovery efforts and continued advancement into novel therapeutic areas and tissue types, along with rising costs associated with CNS studies and lab supplies.

Salaries consist of salary, bonuses, payroll taxes, and related benefits for the Company's R&D personnel. Salaries expense increased $7.9 million, or 47%, for the three months ended June 30, 2024 and $24.3 million, or 51%, for the nine months ended June 30, 2024 compared to the same period of 2023. The increase was primarily due to an increase in R&D headcount that has occurred as the Company has expanded its pipeline of candidates, in addition to annual salary increases.

Facilities-related expense includes lease costs for the Company's research and development facilities in San Diego, California and Madison, Wisconsin. Facilities-related costs increased $2.3 million, or 48%, for the three months ended June 30, 2024 and $8.0 million, or 69%, for the nine months ended June 30, 2024 compared to the same period of 2023. This increase was mainly due to the ATIAs on the lease in San Diego, California. See Note 8 — Leases of Notes to Consolidated Financial Statements of Part I, "Item 1. Financial Statements."

Stock compensation expense, a non-cash expense, was based upon the valuation of stock options and restricted stock units granted to employees. Stock compensation expense decreased $1.7 million, or 19%, for the three months ended June 30, 2024 and $2.4 million, or 9%, for the nine months ended June 30, 2024 compared to the same period of 2023. The decrease was primarily due to the cancelled awards upon the departure of employees.

Depreciation and amortization expense, a non-cash expense, increased $1.4 million, or 49% for the three months ended June 30, 2024 and $4.8 million, or 65%, for the nine months ended June 30, 2024 compared to the same period of 2023. The increase was primarily attributed to higher leasehold improvements, due to completion of the development of the San Diego facility. Additionally, as of December 31, 2023, the Company completed the build out of one of its laboratory and office facilities in Verona, Wisconsin, and commenced depreciation.

The Company anticipates these R&D expenses to continue to increase as its pipeline of candidates grows and

progresses to later phase clinical trials, in addition to inflationary pressure on goods and services and the labor market.

***General & Administrative Expenses***

The following table provides details of the Company's general and administrative expenses for the periods indicated:

| *(in thousands)* | Three Months Ended June 30, 2024 | % of Expense Category | Three Months Ended June 30, 2023 | % of Expense Category | Increase (Decrease) $ | Increase (Decrease) % |
|---|---|---|---|---|---|---|
| Salaries | $ 6,740 | 28 % | $ 5,063 | 21 % | $ 1,677 | 33 % |
| Professional, outside services, and other | 5,410 | 23 % | 5,987 | 25 % | (577) | (10)% |
| Facilities related | 1,238 | 5 % | 1,352 | 6 % | (114) | (8)% |
| Total general & administrative expense, excluding non-cash expenses | $ 13,388 | 56 % | $ 12,402 | 52 % | $ 986 | 8 % |
| Stock compensation | 9,809 | 42 % | 10,965 | 46 % | (1,156) | (11)% |
| Depreciation and amortization | 513 | 2 % | 404 | 2 % | 109 | 27 % |
| Total general & administrative expenses | $ 23,710 | 100 % | $ 23,771 | 100 % | $ (61) | — % |

| *(in thousands)* | Nine Months Ended June 30, 2024 | % of Expense Category | Nine Months Ended June 30, 2023 | % of Expense Category | Increase (Decrease) $ | Increase (Decrease) % |
|---|---|---|---|---|---|---|
| Salaries | $ 20,087 | 28 % | $ 14,275 | 21 % | $ 5,812 | 41 % |
| Professional, outside services, and other | 16,910 | 23 % | 15,293 | 22 % | 1,617 | 11 % |
| Facilities related | 3,278 | 5 % | 3,377 | 5 % | (99) | (3)% |
| Total general & administrative expense, excluding non-cash expenses | $ 40,275 | 56 % | $ 32,945 | 48 % | $ 7,330 | 22 % |
| Stock compensation | 30,759 | 42 % | 33,820 | 50 % | (3,061) | (9)% |
| Depreciation and amortization | 1,350 | 2 % | 1,212 | 2 % | 138 | 11 % |
| Total general & administrative expenses | $ 72,384 | 100 % | $ 67,977 | 100 % | $ 4,407 | 6 % |

Salaries expense increased $1.7 million, or 33%, for the three months ended June 30, 2024 and $5.8 million, or 41%, for the nine months ended June 30, 2024 compared to the same period of 2023. The increase was driven by the combination of annual salary increases and increased headcount required to support the Company's growth.

Professional, outside services, and other expense includes legal, consulting, patent expenses, business insurance expenses, other outside services, travel, and communication and technology expenses. This expense decreased $0.6 million, or 10%, for the three months ended June 30, 2024 and increased $1.6 million, or 11%, for the nine months ended June 30, 2024 compared to the same period of 2023. The increase for the nine months ended June 30, 2024 was mainly due to legal services associated with patent applications and intellectual property matters, as well as other professional services.

Facilities related expense primarily includes rental costs and other facilities-related costs for the Company's corporate headquarters in Pasadena, California.

Stock compensation expense, a non-cash expense, was based upon the valuation of stock options and restricted stock units granted to employees. This expense decreased $1.2 million, or 11%, for the three months ended June 30, 2024 and $3.1 million, or 9%, for the nine months ended June 30, 2024 compared to the same period of 2023. The decrease was mainly due to the decreased compensation costs related to performance awards.

Depreciation and amortization expense, a noncash expense, was primarily related to amortization of leasehold improvements for the Company's corporate headquarters.

The Company anticipates these general and administrative expenses to continue to increase as its pipeline of candidates grows and progresses to later phase clinical trials including commercialization efforts, in addition to inflationary pressure on goods and services and the labor market.

**Other Income (Expense)**

Other income (expense) is primarily related to interest income and expense. Other income increased $2.8 million for the three months ended June 30, 2024 compared to the same period of 2023. The increase was primarily due to the higher

yields on investments due to higher interest rates, offset by the non-cash interest expense on the liability related to the sale of future royalties. The balance remained consistent for the nine months ended June 30, 2024 compared to the same period of 2023.

## LIQUIDITY AND CAPITAL RESOURCES

The Company has historically financed its operations through the sale of its equity securities, revenue from its licensing and collaboration agreements, and the sale of certain future royalties. Research and development activities have required significant capital investment since the Company's inception and are expected to continue to require significant cash expenditure as the Company's pipeline continues to expand and matures into later stage clinical trials. Additionally, the Company expanded its facilities in Verona, Wisconsin and leased additional facilities in San Diego, California. Each of these expansions is designed to increase the Company's internal manufacturing and discovery capabilities and requires significant capital investment.

The Company's cash, cash equivalents and restricted cash decreased to $69.4 million at June 30, 2024 compared to $110.9 million at September 30, 2023. Cash invested in available-for-sale securities was $367.3 million at June 30, 2024 compared to $292.7 million at September 30, 2023.

On December 2, 2022, the Company entered into the Open Market Sale Agreement, pursuant to which the Company may, from time to time, sell up to $250.0 million in shares of the Company's common stock through Jefferies LLC, acting as the sales agent and/or principal, in an at-the-market offering. As of June 30, 2024, no shares have been issued under the Open Market Sale Agreement.

On January 2, 2024, the Company entered into an underwriting agreement with Jefferies LLC, BofA Securities, Inc., and Cowen and Company, LLC, as representatives of the several underwriters. The Company issued 15,790,000 shares of common stock at an offering price of $28.50 per share. The aggregate purchase price paid by investors was $450.0 million and the Company received net proceeds of $429.3 million after deducting advisory fees and offering expenses.

The Company believes its current financial resources are sufficient to fund its operations through at least the next twelve months from the date of the issuance of these financial statements.

The following table presents a summary of cash flows:

| | Nine Months Ended June 30, | |
|---|---|---|
| | 2024 | 2023 |
| | (in thousands) | |
| Cash Flow from: | | |
| Operating activities | $ (325,635) | $ (127,964) |
| Investing activities | (197,149) | (126,664) |
| Financing activities | 481,431 | 252,232 |
| Net decrease in cash, cash equivalents and restricted cash | $ (41,353) | $ (2,396) |
| Cash, cash equivalents and restricted cash at end of period | $ 69,399 | $ 105,334 |

During the nine months ended June 30, 2024, cash flow used in operating activities was $325.6 million, which was primarily due to the ongoing expenses related to the Company's research and development programs and general and administrative expenses. Cash used in investing activities amounted to $197.1 million, which was primarily attributable to capital expenditures of $117.2 million and investment purchases of $428.6 million, offset by proceeds from sales and maturities of investments of $348.6 million. Cash provided by financing activities of $481.4 million was related to cash received from the issuance of common stock, a milestone payment from Royalty Pharma, and stock option exercises (See Note 6 — Stockholders' Equity of Notes to Consolidated Financial Statements of Part I, "Item 1. Financial Statements.").

During the nine months ended June 30, 2023, cash flows used in operating activities was $128.0 million, which was primarily due to the ongoing expenses related to the Company's research and development programs and general and administrative expenses, partially offset by the receipt of $110.0 million from collaboration and license agreements. Cash used in investing activities was $126.7 million, which was primarily related to capital expenditures, $112.8 million of construction in progress and investment purchases of $234.0 million, offset by maturities of investments of $220.2 million. Cash provided by financing activities of $252.2 million was primarily related to the $250.0 million payment from Royalty Pharma as well as cash received from stock option exercises. See Note 11 – Liability Related to the Sale of Future

Royalties of Notes to Consolidated Financial Statements of Part I, “Item 1. Financial Statements.”

**Contractual Obligations**

There has been no material change in the Company’s contractual obligations from that described in Item 7 of its Annual Report on Form 10-K for the year ended September 2023.

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

There has been no material change in the Company’s exposure to market risk from that described in Item 7A of its Annual Report on Form 10-K for the year ended September 30, 2023.

## ITEM 4. CONTROLS AND PROCEDURES

**Evaluation of Disclosure Controls and Procedures**

The Company maintains disclosure controls and procedures designed to ensure that information required to be disclosed in its reports filed under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC rules and forms, and that such information is accumulated and communicated to its management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes 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 necessarily was required to apply its judgment in evaluating the cost benefit relationship of possible controls and procedures.

As required by Rule 13a-15(b) of the Exchange Act, the Company carried out an evaluation, under the supervision and with the participation of its management, including its Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company’s disclosure controls and procedures as of the end of the quarter covered by this Quarterly Report on Form 10-Q. Based on the foregoing, the Company’s Chief Executive Officer and Chief Financial Officer concluded that the Company’s disclosure controls and procedures were effective at the reasonable assurance level.

**Changes in Internal Control Over Financial Reporting**

There has been no change in the Company’s internal control over financial reporting during the Company’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting. The Company regularly evaluates its controls and procedures and makes improvements in the design and effectiveness of established controls and procedures and the remediation of any deficiencies which may be identified during this process.

## PART II—OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

From time to time, the Company may be involved in routine legal proceedings, as well as demands, claims and threatened litigation, which arise in the normal course of its business. Litigation can be expensive and disruptive to normal business operations. Moreover, the results of legal proceedings, particularly complex legal proceedings, cannot be predicted with any certainty. There have been no material developments in the legal proceedings that the Company disclosed in Part I, Item 3 of its Annual Report on Form 10-K for the year ended September 30, 2023.

### ITEM 1A. RISK FACTORS

The Company's business, results of operations and financial conditions are subject to various risks. These risks are described elsewhere in this Quarterly Report on Form 10-Q and in the Company's other filings with the SEC, including the Company's Annual Report on Form 10-K for the year ended September 30, 2023. There have been no material changes from the risk factors identified in the Company's Annual Report on Form 10-K for the year ended September 30, 2023.

### 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

***(c) Trading Plans***

During the quarter ended June 30, 2024, the following directors and officers (as defined in Exchange Act Rule 16a-1(f)) adopted certain trading plans intended to satisfy Rule 10b5-1(c):

| Name | Title | Adoption Date | Plan Start Date | Plan End Date | Shares Vesting and Subject to Sell-To-Cover [1] | Other Shares Being Sold (Subject to Certain Conditions) |
|---|---|---|---|---|---|---|
| Victoria Vakiener | Board Member | 5/15/2024 | 12/16/2024 | 12/31/2024 | n/a | 8,994 |

*[1] This column indicates the total number of shares vesting in connection with equity awards, not the number of shares to be sold. The actual number of shares to be sold will be a smaller number based on whatever is required to satisfy payment of applicable withholding taxes under sell-to-cover arrangements.*

***Financing Agreement***

On August 7, 2024 (the "Closing Date"), the Company entered into a financing agreement (the "Financing Agreement") with the guarantors party thereto, the lenders party thereto (the "Lenders"), and Sixth Street Lending Partners, as the administrative agent and collateral agent for the Lenders. The Financing Agreement provides for a senior secured term loan facility of up to an aggregate principal amount of $935.3 million (the "Credit Facility"), consisting of (a) an initial draw term loan facility in an aggregate principal amount of $400.0 million, funded on the Closing Date (the "Initial Loan"), (b) a delayed draw term loan in an aggregate principal amount not exceeding $435.3 million (the "Delayed Draw Term Loan") and (c) an uncommitted incremental facility in an aggregate principal amount not to exceed $100.0 million (the "Incremental Facility" and the loans made thereof, the "Incremental Term Loans"). The Credit Facility matures on August 7, 2031 (the "Maturity Date") and bears interest at an annual rate equal to 15.0%. Certain additional commitment and undrawn amount fees are also payable in connection with the Credit Facility.

The Company is permitted to use the proceeds of the Initial Loan for working capital, capital expenditures and

general corporate purposes of the Company and its subsidiaries. The proceeds of Delayed Draw Term Loans made after the Closing Date are permitted to be applied by the Company solely to pay interest on the Credit Facility. The Incremental Term Loans made after the Closing Date are permitted to be applied by Company in a manner as agreed upon between the Company and the administrative agent.

The Credit Facility does not provide for scheduled amortization payments during the term. All principal will be due on the Maturity Date. The Company will have the right to prepay loans under the Credit Facility at any time. The Company is required to partially repay loans under the Credit Facility with proceeds from certain asset sales, condemnation events and extraordinary receipts, subject, in some cases, to reinvestment rights. Repayments are not subject to a prepayment premium.

All obligations under the Financing Agreement will be secured on a first-priority basis, subject to certain exceptions, by security interests in substantially all assets of the Company and material subsidiaries of the Company, including its intellectual property, and will be guaranteed by material subsidiaries of the Company, including foreign subsidiaries, subject to certain exceptions.

The Financing Agreement contains customary covenants, including, without limitation, negative covenants that, subject to certain exceptions, restrict indebtedness, liens, investments (including acquisitions), fundamental changes, asset sales and licensing transactions, dividends, modifications to material agreements, payment of subordinated indebtedness, and other matters customarily restricted in such agreements. The Company is subject to restrictions on sales and licensing transactions with respect to certain core intellectual property, subject to certain exceptions, including certain transactions related to areas outside the United States, the United Kingdom, the European Union, Japan and China.

The Financing Agreement also contains certain events of default after which loans under the Credit Facility may be due and payable immediately, including payment defaults, material inaccuracy of representations and warranties, covenant defaults, bankruptcy and insolvency proceedings, cross-defaults to certain other agreements, judgments against the Company and its subsidiaries, cessation of business and change of control.

The above description of the Financing Agreement and Credit Facility is a summary only and is qualified in its entirety by reference to the Financing Agreement, which will be filed as an exhibit to the Company’s Annual Report on Form 10-K for the year ending September 30, 2024.

**ITEM 6. EXHIBITS**

| Exhibit Number | Document Description |
|---|---|
| 3.1 | Amended and Restated Certificate of Incorporation (incorporated by reference from Exhibit 3.3 of the Company's Form 8-K filed on April 6, 2016) |
| 3.2 | Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Arrowhead Pharmaceuticals, Inc. (incorporated by reference from Exhibit 3.2 of the Company's Form 10-Q filed on May 2, 2023) |
| 3.3 | Second Amended and Restated Bylaws of Arrowhead Pharmaceuticals, Inc., as amended January 24, 2023(incorporated by reference from Exhibit 3.3 of the Company's Form 10-Q filed on May 2, 2023) |
| 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.INS* | Inline XBRL Instance Document |
| 101.SCH* | Inline XBRL Taxonomy Extension Schema Document |
| 101.CAL* | Inline XBRL Taxonomy Extension Calculation Linkbase Document |
| 101.LAB* | Inline XBRL Taxonomy Extension Label Linkbase Document |
| 101.PRE* | Inline XBRL Taxonomy Extension Presentation Linkbase Document |
| 101.DEF* | Inline XBRL Taxonomy Extension Definition Linkbase Document |
| 104* | The cover page from this Quarterly Report on Form 10-Q, formatted in Inline XBRL (included as Exhibit 101) |

* Filed herewith.
** Furnished herewith.
† Certain portions of this exhibit were redacted by means of marking such portions with asterisks because the identified portions are (i) not material and (ii) treated as private or confidential by the Company.

**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 8, 2024

ARROWHEAD PHARMACEUTICALS, INC.

By: /s/ Kenneth A. Myszkowski

Kenneth A. Myszkowski
Chief Financial Officer
(Principal Financial Officer and Duly Authorized Officer)

**Exhibit 31.1**

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

I, Christopher Anzalone, Chief Executive Officer of Arrowhead Pharmaceuticals, Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arrowhead Pharmaceuticals, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: August 8, 2024

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

**Exhibit 31.2**

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

I, Kenneth A. Myszkowski, Chief Financial Officer of Arrowhead Pharmaceuticals, Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arrowhead Pharmaceuticals, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: August 8, 2024

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

**Exhibit 32.1**

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

I, Christopher Anzalone, Chief Executive Officer of Arrowhead Pharmaceuticals, Inc. (the "Company"), certify, pursuant to Rule 13(a)-14(b) or Rule 15(d)-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that (i) the Quarterly Report on Form 10-Q of the Company for the quarterly period ended June 30, 2024, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: August 8, 2024

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

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

**Exhibit 32.2**

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

I, Kenneth A. Myszkowski, Chief Financial Officer of Arrowhead Pharmaceuticals, Inc. (the "Company"), certify, pursuant to Rule 13(a)-14(b) or Rule 15(d)-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that (i) the Quarterly Report on Form 10-Q of the Company for the quarterly period ended June 30, 2024, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: August 8, 2024

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

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