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FOIA CONFIDENTIAL TREATMENT REQUEST

CERTAIN PORTIONS OF THIS LETTER AS FILED VIA EDGAR HAVE BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED BY ARROWHEAD PHARMACEUTICALS, INC. WITH RESPECT TO THE OMITTED PORTIONS. OMITTED INFORMATION HAS BEEN REPLACED IN THIS LETTER AS FILED VIA EDGAR WITH A PLACEHOLDER IDENTIFIED BY THE MARK [***].

March 13, 2018

CONFIDENTIAL SUBMISSION VIA EDGAR AND HAND DELIVERY
U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, DC 20549
Attention: Ms. Torney

Re: *Arrowhead Pharmaceuticals, Inc.*
Form 10-K for the year ended September 30, 2017
Filed December 12, 2017
File No. 001-38042

Dear Ms. Torney:

On behalf of Arrowhead Pharmaceuticals, Inc. (the "Company"), we submit this supplemental letter in response to comments from the Staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") received by letter dated February 28, 2018 (the "Comment Letter") regarding the Company's Annual Report on Form 10-K for the year ended September 30, 2017, which was filed with the Commission on December 12, 2017 (the "Annual Report").

Because of the commercially sensitive nature of certain information contained herein, this submission is accompanied by the Company's request for confidential treatment for selected portions of this letter. The Company has filed a separate letter with the Office of Freedom of Information and Privacy Act Operations in connection with the confidential treatment request, pursuant to Rule 83 of the Commission's Rules on Information and Requests, 17 C.F.R. § 200.83. For the Staff's reference, we have enclosed a copy of the Company's letter to the Office of Freedom of Information and Privacy Act Operations, as well as a copy of this correspondence, marked to show the portions redacted from the version filed via EDGAR and for which the Company is requesting confidential treatment.

Below are the Company's responses to the comments of the Staff. For your convenience, this letter is formatted to reproduce your numbered comments in bold italicized text.

1. ***Consolidated Statements of Operations and Comprehensive Loss, page F-5***
With respect to the line items, salaries and payroll-related costs, stock-based compensation and depreciation and amortization, please tell us why each is not reflected, as applicable, within research and development and general and administrative expenses. Refer us to the authoritative literature supporting your presentation.

The Company has presented, separate from Research and Development expense and from General and Administrative expense in its Statement of Operations, the amounts for salaries and payroll-related costs, stock-based compensation and depreciation & amortization. The Company does provide a breakdown of salaries and payroll-related costs by Research & Development and General & Administrative expenses within its Management Discussion and Analysis (MD&A) section. Historically, the Company has not provided a breakdown of depreciation and amortization or stock-based compensation costs by Research & Development and General & Administrative expenses.

In future periodic filings, including the Form 10-K for the fiscal year ended September 30, 2018, the Company proposes to remove from our Statement of Operations the line items (1) salaries and payroll-related costs (2) stock-based compensation, and (3) depreciation and amortization, and include these data, as appropriate, within the captions of Research and Development and General and Administrative expenses. The Company will also provide a breakdown of each of these costs within Research & Development expenses and General & Administrative expenses within its MD&A section.

2. Note 2. Collaboration and License Agreement - Amgen, Inc., page F-12

Please address each of the following:

Provide us a schedule showing a description and amount for each milestone within the $617 million in option payments, and development, regulatory and sales milestone payments. In your description for each amount, indicate what has to be achieved in order for you to receive a payment, and the extent to which achievement is based on your versus Amgen's performance.

Please see below for a list of the milestones and what needs to be achieved to receive a payment for each. In both agreements, Amgen is wholly responsible for clinical development and commercialization, and as such, the achievement of these milestones will be based solely upon Amgen's performance. All capitalized terms below are defined in each agreement, and the agreements were filed as exhibits 10.18 and 10.19 to our Form 10-K for the year ended September 30, 2016, filed on December 14, 2016.

ARO-LPA Agreement:

[***]

Total ARO-LPA Agreement milestones = [***]

ARO-AMG1 Agreement:

1) [***] - Option Exercise Fee and purchase of Third Tranche Shares. Consists of a [***] fee, and a $5 million purchase of the Third Tranche Shares as defined in the Common Stock Purchase Agreement filed as Exhibit 10.1 to Amendment No. 1 to the Registration Statement on Form S-3 (File No. 333-214311). This payment will be triggered if Amgen's elects to exercise its Option to a worldwide, exclusive license to ARO-AMG1, which the Company is currently developing.

[***]

Total ARO-AMG1 Agreement milestones = [***]

Provide us an analysis with reference to authoritative literature supporting your accounting treatment of the payments in the preceding bullet as disclosed in Note 1 within "revenue recognition."

The Company will first provide its accounting treatment for the ARO-LPA Agreement and associated payments, followed by the ARO-AMG1 Agreement.

ARO-LPA Agreement:
The ARO-LPA Agreement constitutes a multiple-element arrangement, as the Company has provided multiple deliverables to Amgen. The Company has determined that the deliverables under the ARO-LPA Agreement include the license granted to clinically develop and commercialize ARO-LPA, and the oversight of certain of the development and manufacturing activities. Beyond these deliverables, Amgen is wholly responsible for clinical development and commercialization.

The Company then referenced paragraph ASC 605-25-25-5 in determining whether the deliverables shall be considered separate units of accounting. The Company determined that the deliverables should not be considered separate units of accounting because neither the license nor the development and manufacturing activities have standalone value to Amgen. The deliverables are not sold separately by any vendor, and could not be resold by Amgen on a standalone basis. The Company then referenced paragraph ASC 605-25-25-6 which states that the allocation of arrangement consideration and the recognition of revenue then shall be determined for those combined deliverables as a single unit of accounting.

With regard to the arrangement consideration, the Company then examined ASC 605-28-20 which provides the definition of a milestone, and ASC 605-28-25-2 which distinguishes between substantive and non-substantive milestones. The Company determined that all future milestone payments listed in response 1 above do not meet the FASB definition of a milestone, given that they would be driven by Amgen's performance and not the Company's. The Company then referred to ASC 605-25-30-1 which states that the arrangement consideration is limited to amounts that are fixed or determinable, other than for the potential effects of refund rights, concessions, or performance bonuses. Given that the future milestone payments are all driven by Amgen's performance and are contingent in nature, none of these future payments are currently included in the Company's revenue recognition and none will be until the milestone is achieved.

Finally, the Company then determined the period over which the performance obligations would be performed and revenue will be recognized for the upfront $30 million payment received in November 2016 and for the future milestone payments. Revenue is recognized using a proportional performance or straight-line method. The Company chose the straight-line basis for this agreement as it felt that this was the best estimate of the timing of effort required for the development and manufacturing activities. The Company determined the period of straight-line revenue recognition to be November 18, 2016 (the Hart-Scott-Rodino clearance date), through October 31, 2017, which is the date where the development and manufacturing activities were substantially complete.

As such, the Company recognized $27.3 million of the upfront $30 million into revenue during the year ended September 30, 2017, and the remaining $2.7 million was recognized during the three months ended December 31, 2017. Given that the deliverables have been substantially completed and any future milestones achieved will be determined wholly by Amgen's performance, any future milestone payments received will be recognized in their entirety in the period they are achieved.

ARO-AMG1 Agreement:
The ARO-AMG1 Agreement constitutes a multiple-element arrangement, as the Company has provided multiple deliverables to Amgen. The Company has determined that the deliverables under the ARO-AMG1 Agreement include the Option to license, the joint research committee and the development and manufacturing activities toward achieving the Arrowhead Deliverable (as defined in the agreement). After exercising the Option to license, Amgen is wholly responsible for clinical development and commercialization.

The Company then referenced paragraph ASC 605-25-25-5 in determining whether the deliverables shall be considered separate units of accounting. The Company determined that the deliverables should not be considered separate units of accounting because neither the Option to license, the joint research committee meetings, nor the development and manufacturing activities toward achieving the Arrowhead Deliverable have standalone value to Amgen. The deliverables are not sold separately by any vendor, and could not be resold by Amgen on a standalone basis. The Company then referenced paragraph ASC 605-25-25-6 which states that the allocation of arrangement

consideration and the recognition of revenue then shall be determined for those combined deliverables as a single unit of accounting.

With regard to the arrangement consideration, the Company then examined ASC 605-28-20 which provides the definition of a milestone, and ASC 605-28-25-2 which distinguishes between substantive and non-substantive milestones. The Company determined that all future milestone payments listed in response 1 do not meet the FASB definition of a milestone, given that they would be driven by Amgen's performance and not the Company's. The Company then referred to ASC 605-25-30-1 which states that the arrangement consideration is limited to amounts that are fixed or determinable, other than for the potential effects of refund rights, concessions, or performance bonuses. Given that the future milestone payments are all driven by Amgen's performance and are contingent in nature, none of these future payments are currently included in the Company's revenue recognition and none will be until the milestone is achieved.

Finally, the Company then determined the period over which the performance obligations would be performed and revenue will be recognized. Revenue is recognized using a proportional performance or straight-line method. The Company chose the straight-line basis for this agreement as it felt that this was the best estimate of the timing of effort required to complete the development and manufacturing activities necessary to achieve the Arrowhead Deliverable. The Company determined the period of straight-line revenue recognition to be October 1, 2016 through September 30, 2018. The due date for achieving the Arrowhead Deliverable is September 28, 2018.

As such, the Company recognized $2.5 million of the upfront $5 million into revenue during the year ended September 30, 2017, and the remaining $2.5 million will be recognized into revenue on a straight-line basis during the year ended September 30, 2018. If the Arrowhead Deliverable is achieved, Amgen then has one year to determine whether it will exercise its Option to license the ARO-AMG1 candidate. The fee associated with exercising the Option and all future milestones achieved thereafter will be determined wholly by Amgen's performance. As such, any future milestone payments received (including the Option Exercise Fee) will be recognized in their entirety in the period they are achieved.

Provide us analysis with reference to authoritative literature supporting your accounting for the January 2017 separate services agreement with Amgen as a separate agreement and not as one in-substance arrangement with the September 28, 2016 agreements.

The Company acknowledges ASC 605-25-25-3 which states that separate contracts with the same entity or related parties that are entered into at or near the same time are presumed to have been negotiated as a package and shall, therefore, be evaluated as a single arrangement in considering whether there are one or more units of accounting. However, the Company feels that in substance, the January 2017 separate services agreement (the "Services Agreement") and associated deliverables should be treated accounted for separately from the ARO-LPA Agreement for the following reasons:

1) The Services Agreement was entered into based upon Amgen's request for our additional services (i.e. it was not a requirement in the ARO-LPA Agreement for Amgen to utilize our services).
2) Critical terms of the Services Agreement, including pricing, were not defined in the ARO-LPA Agreement and the pricing for each service delivered under the Services Agreement has no dependence upon the payments contemplated in the ARO-LPA Agreement.
3) Amgen has the right to arrange for comparable services with another vendor.
4) Each of the services delivered under the Services Agreement pertain to deliverables beyond the original scope of the ARO-LPA Agreement.
5) The services delivered under the Services Agreement are single performance obligations.

As such, we believe that in substance, the Services Agreement should be accounted for as a separate agreement, and not as one in-substance arrangement with the ARO-LPA and ARO-AMG1 Agreements.

Justify for us pursuant to ASC 605-25 your policy in Note 1 under "revenue recognition" whereby you indicate that standalone value requires "that a value can be determined."

In future periodic filings, including the Form 10-K for the fiscal year ended September 30, 2018, the Company proposes to revise its future disclosures in Note 1 as follows:

"The Company recognizes upfront license payments as revenue upon delivery of the license only if the license **is determined to be a separate unit of accounting from the other undelivered performance obligations.** ~~has standalone value from any undelivered performance obligations and that value can be determined~~. The undelivered performance obligations typically include manufacturing or development services or research and/or steering committee services. ~~If the fair value of the undelivered performance obligations can be determined, then these obligations would be accounted for separately.~~ If the license is not considered to have standalone value, then the license and other undelivered performance obligations would be accounted for as a single unit of accounting. In this case, the license payments and payments for performance obligations are recognized as revenue over the estimated period of when the performance obligations are performed or deferred indefinitely until the undelivered performance obligation is determined."

In responding to the Staff's comments, the Company acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

We appreciate the opportunity to respond to the Staff's comments.

Very truly yours,

/s/ Ryan A. Murr

Ryan A. Murr

cc: Christopher Anzalone, Arrowhead Pharmaceuticals, Inc.