[Cytokinetics Letterhead]

January 9, 2015

VIA EDGAR

Securities and Exchange Commission
Attention: Jim B. Rosenberg
Mary Mast
Frank Wyman
100 F Street, N.E.
Washington, D.C. 20549

Re: Cytokinetics, Inc. ("Cytokinetics" or the "Company")
Form 10-K for the Fiscal Year Ended December 31, 2013
Filed March 7, 2014
File No. 0-50633

Ladies and Gentlemen:

We are responding to comments received from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") by letter dated December 11, 2014 with respect to Cytokinetics' Form 10-K for fiscal year ended December 31, 2013 (the "2013 Form 10-K"). The numbering of the paragraphs below corresponds to the numbering of your comment letter, the text of which we have incorporated into this response letter for convenience.

Notes to Consolidated Financial Statements
Note 7 – Related Party Transactions
Research and Development Arrangements, page 92

1. Please address the following related to your amended agreement with Amgen in June 2013 in which you recognized $17.2 million in license revenue in the fourth quarter of 2013:

- *Please tell us what consideration was given to accounting for the amendment to the Amgen agreement as a material modification. Refer to ASC 605-25-65-1.*

Cytokinetics acknowledges the Staff's comment.

The amendment executed in June 2013 extended Amgen's exclusive license rights for omecamtiv mecarbil to include the territory of Japan. Amgen agreed to pay an additional $15 million in consideration for the additional license rights. The Company was contractually able to sell this license to any third party and believes that it could have done so for the same value. The amendment

also required the Company to perform services related to the conduct of a Phase I pharmacokinetic study intended to support inclusion of Japan in a potential Phase III clinical development program and potential global registration dossier for omecamtiv mecarbil (the "Bridging Study") for Amgen. These services could have been performed by Amgen or by a contract research organization. The amount of the additional consideration to be paid by Amgen for the services to be performed related to the Bridging Study was finalized in the fourth quarter of 2013. All other terms of the original agreement, with amendments entered into prior to June 2013, remained the same. The Company concluded the June 2013 amendment constituted a new arrangement as it resulted in the Company providing additional separate and distinct rights and services to Amgen in exchange for incremental consideration that constituted the fair value for those additional deliverables. Accordingly, the Company accounted for the amendment as a new arrangement rather than a material modification of the Amgen agreement. Furthermore, there was no deferred revenue related to the original agreement at the execution date of the amendment.

- *Please provide proposed disclosure to be included in future periodic reports explaining the factors that you considered in concluding that the license had stand-alone value.*

Cytokinetics acknowledges the Staff's comment, and will undertake to include in its Form 10-K for year ending December 31, 2014 (the "2014 Form 10-K") substantially the following disclosure in the section entitled "Note 7 – Related Party Transactions" (or the successor to this section):

"The Company determined that the license to the Japan territory granted under the Amgen Agreement Amendment was a separate, non-contingent deliverable under the amendment. The Company determined that the license has stand-alone value based on Amgen's internal product development capabilities since all relevant manufacturing know-how related to omecamtiv mecarbil was previously delivered to Amgen."

- *You state that all conditions necessary for revenue recognition under ASC 605-10 had been satisfied in the fourth quarter of 2013. If you believe the license had stand-alone value, please tell us why revenue recognition did not occur until the fourth quarter of 2013.*

Cytokinetics acknowledges the Staff's comment. The Company evaluated the revenue recognition criteria and determined that not all the criteria were met at the execution date of the amended Agreement. Specifically, the scope and price to the buyer as it related to the Bridging Study services was not fixed or determinable at the date of execution, as the protocol for the Bridging Study and related budget had not yet been finalized. Therefore, the revenue associated with the upfront license fee was deferred until the fixed or determinable criterion was satisfied, which occurred upon approval of the protocol and budget for the Bridging Study by the Joint Development Committee of Amgen and Cytokinetics in the fourth quarter of 2013.

- *Your accounting policy on page 85 states that non-refundable license fees are recognized as revenue as the Company performs under the applicable agreement. Please provide proposed disclosure to clarify your accounting policy when the license has stand-alone value.*

Cytokinetics acknowledges the Staff's comment, and will undertake in the 2014 Form 10-K and in its future periodic reports to include substantially the following disclosure in the section entitled "Revenue Recognition" under "Note 1 – Organization and Significant Account Policies" (or the successor to this section):

> "Where the license does not have stand-alone value, non-refundable license fees are recognized as revenue as the Company performs under the applicable agreement. Where the level of effort is relatively consistent over the performance period, the Company recognizes total fixed or determined revenue on a straight-line basis over the estimated period of expected performance. Where the license has stand-alone value, the Company recognizes total license revenue at the time all revenue recognition criteria have been met."

> *2. You state on pages 93 and 94 that you are eligible to receive $650 million of pre-commercialization and commercialization milestones relating to your Amgen agreement and $250 million of development and commercialization milestones relating to your Astellas agreement. For each agreement, please provide us proposed disclosure to be included in future periodic reports indicating the nature of each milestone and its amount. Refer to ASC 605-28-50.*

Cytokinetics acknowledges the Staff's comment, and will undertake in the 2014 Form 10-K and in its future periodic reports to include substantially the following disclosure in the section entitled "Note 7. Research and Development Arrangements – Amgen" (or the successor to this section):

> "Under the Amgen Agreement, as amended, the Company is eligible for additional development milestone payments which are based on various clinical milestones, including the initiation of certain clinical studies, the submission of a drug candidate to certain regulatory authorities for marketing approval and the receipt of such approvals, and which could total over $350 million. Additionally, up to $300 million in commercial milestones could be received provided certain sales targets are met. Due to the nature of drug development, including the inherent risk of development and approval of drug candidates by regulatory authorities, it is not possible to estimate if and when these milestone payments could become due. The achievement of each of these milestones is dependent solely upon the results of Amgen's development and commercialization activities and therefore none of these milestones was deemed to be substantive. During the period ended December 31, 2014, zero dollars were recognized for milestones achieved under the Amgen Agreement."

Cytokinetics will also undertake in the 2014 Form 10-K and in its future periodic reports to include substantially the following disclosure in the section entitled "Note 8. Other Research and Development Revenue Arrangements – Astellas Pharma Inc." (or the successor to this section):

> "Additional research and early and late stage development milestone payments which are based on various research and clinical milestones, including the initiation of certain clinical studies, the submission for approval of a drug candidate to certain regulatory authorities for marketing approval and the commercial launch of collaboration products could total over $250 million. Additionally, $200 million in commercial milestones could be received provided certain sales targets are met. Due to the nature of drug development, including the inherent risk of development and approval of drug candidates by regulatory authorities, it is not possible to estimate if and when these milestone payments could become due.

"The Company believes that each of the milestones related to research and early development under the Astellas Agreement is substantive and can only be achieved with the Company's past and current performance and each milestone will result in additional payments to the Company. During the period ended December 31, 2014, $17 million was recognized as milestone revenue for early development under this agreement. The Company is eligible to receive up to $2 million in research milestone payments for each future collaboration product candidate.

"The achievement of each of the late stage development milestones and the commercialization milestones are dependent solely upon the results of Astellas' development activities and therefore these milestones were not deemed to be substantive."

Cytokinetics further acknowledges that:

- Cytokinetics 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 filings; and
- Cytokinetics 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.

Please contact me at (650) 624-3009, or Michael Tenta of Cooley LLP at (650) 843-5636, with any questions or further comments regarding our responses to the Staff's comments.

Sincerely yours,

/s/ Sharon Barbari

Sharon Barbari
Cytokinetics, Inc.
Executive Vice President and Chief Financial Officer

cc. Marjorie Wagman, General Counsel