

Michael E. Tenta (650) 843-5636 mtenta@cooley.com VIA EDGAR

April 4, 2011

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, DC 20549

Attn: Jeffrey Riedler Scot Foley

RE: Cytokinetics, Incorporated

Preliminary Proxy Statement on Schedule 14A

Filed March 17, 2011 File No. 000-50633

Ladies and Gentlemen:

On behalf of Cytokinetics, Incorporated (the "*Company*"), we are submitting this letter in response to the comment of the Staff (the "*Staff*") of the Securities and Exchange Commission (the "*Commission*") by letter dated March 25, 2011 (the "*Comment Letter*"). Set forth below is the comment in your Comment Letter followed by our response.

Proposal Three, page 5

1. Your proposal to amend your Certificate of Incorporation to increase the number of authorized shares of common stock does not state whether you have any current plans, agreements, understandings, etc. with respect to the additional shares you propose to have authorized. If you have any such plans, agreements, understandings, etc., please note this in your disclosure and describe them. If you have none, please include a statement to that effect.

The Company acknowledges the Staff's comment and respectfully advises the Staff that the Company did not receive the Comment Letter until March 31, 2011, when it was delivered by the U.S. Postal Service. In reliance on Rule 14a-6, the Company filed with the Commission and began printing in hardcopy its Definitive Proxy Statement on Schedule 14A on March 28, 2011, having not received comment from the Commission within ten days of filing its Preliminary Proxy Statement on Schedule 14A on March 17, 2011. The Company respectfully advises the Staff that it is therefore no longer practicable to amend the disclosure in its Definitive Proxy Statement on Schedule 14A.

Further to discussions between the undersigned and Mr. Foley, we understand that the Commission also transmitted the Comment Letter by facsimile. Regrettably, the Company did not receive the facsimile. As discussed with Mr. Foley, we understand that in light of the

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Securities and Exchange Commission April 4, 2011 Page Two

circumstances, the Staff will not require an amendment or supplement to the Company's Definitive Proxy Statement. The Company supplementally advises the Staff that the Company does not have any current plans, agreements, understandings, etc. with respect to the additional shares of common stock that the Company proposes to have authorized.

Please do not hesitate to contact me at (650) 843-5636 if you have any questions or would like any additional information regarding this response.

Sincerely,

/s/ Michael E. Tenta

Michael E. Tenta

cc: Sharon A. Barbari, Cytokinetics, Incorporated Robert L. Jones, Cooley LLP

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