

May 19, 2010

CORRESPONDENCE FILED
VIA EDGAR TRANSMISSION

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.W.
Mail Stop 4720
Washington, D.C. 20549

Re: **Cyclacel Pharmaceuticals, Inc.**
Current Report on Form 8-K
Filed on May 13, 2010
File No. 000-50626

Ladies and Gentlemen:

On behalf of Cyclacel Pharmaceuticals, Inc. (the “**Company**”), we hereby respond to the letter sent by the Securities and Exchange Commission (the “**Commission**”) dated May 14, 2010 from Tabitha Akins, Staff Accountant, Division of Corporate Finance (the “**Comment Letter**”) regarding the Company’s Current Report on Form 8-K filed with the Commission on May 13, 2010 (the “**Form 8-K**”).

Set forth below are the Company’s responses to the Commission’s Comment Letter. The Company’s responses are numbered to correspond to the comments, as set forth in the Comment Letter, which, for convenience, we have incorporated into this response letter.

Item 4.02 Non-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review.

1. Please revise your disclosure to elaborate on any internal control deficiencies that allowed the error in calculating the net loss per share and in the errors related to the presentation and Preferred Stock dividend to prevail over time and explain whether these amounted to a material weakness.

Response: The Company acknowledges the Commission’s comment. However, on May 17, 2010, the Company filed Amendment No. 1 to its Annual Report on Form 10-K for the year ended December 31, 2009 (the “**Form 10-K/A**,” which was again amended on May 19, 2010 to correct the date of the report of the Company’s auditor) and, as explained in the “*Explanatory Note*” to the Form 10-K/A, in addition to identifying the error in the Company’s calculation and disclosures in the consolidated statements of cash flows related to the payment of preferred dividends, the Company’s management in parallel identified a related deficiency with respect to its internal controls over financial reporting, specifically in its controls over the computation of net loss per share and the financial statement presentation of its preferred stock dividends in the statement of cash flows, that constitutes a material weakness. As a result, the Company has amended Part I, Item 9T, of the Form 10-K/A, captioned “*Controls and Procedures*,” under which item management revised its previous assessment of its internal

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controls, described the deficiency that constituted a material weakness, and concluded that its internal controls over financial reporting were deficient as of December 31, 2009 (see page 90 of the Form 10-K/A). Corresponding changes were also made under Part I, Item 1A, captioned “*Risk Factors—Failure to achieve and maintain internal controls in accordance with Sections 302 and 404 of the Sarbanes-Oxley Act of 2002 could have a material adverse effect on our business and stock price*” and “*We incur increased costs and management resources as a result of being a public company, and we still may fail to comply with public company obligations,*” (see page 17 of the Form 10-K/A); Part II, Item 6, captioned “*Selected Financial Data*” (see starting page 25 of the Form 10-K/A); Part II, Item 7, captioned “*Management’s Discussion and Analysis of Results of Operations and Financial Condition*” (see starting page 28 of the Form 10-K/A); and Part II, Item 8, captioned “*Financial Statements and Supplementary Data*” (see starting page 45 of the Form 10-K/A).

Because the Company has already filed the Form 10-K/A and its Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, each of which addresses the issues raised in, and contain the disclosures requested by, this comment, the Company respectfully requests that it not be required to amend its Form 8-K, as the Company believes that amending its Form 8-K to contain duplicative disclosures that are already on file with the Commission may create confusion in the market.

2. Please tell us whether you have reconsidered, in accordance with Item 307 of Regulation S-K, the adequacy of your previous assertions in your December 31, 2009 10-K filing regarding your disclosure controls and procedures, in light of the material error that you have described.

Response: The Company acknowledges the Commission’s comment and respectfully refers the Commission to the Company’s response to comment 1 above.

3. Please tell us whether you have reassessed and whether you are planning to revise your conclusion related to the effectiveness of your internal control over financial reporting. Tell us whether your original disclosures are still appropriate or whether they will be modified or supplemented to include any other material information that is necessary for such disclosures not to be misleading in light of the restatement.

Response: The Company acknowledges the Commission’s comment and respectfully refers the Commission to the Company’s response to comment 1 above.

* * *

Please call Todd Mason at (212) 692-6731 or the undersigned at (212) 692-6774 with any comments or questions regarding this letter and please send a copy of any written comments to the following parties:

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New York, NY 10017
Fax: (212) 983-3115

Very truly yours,

/s/Joel I. Papernik

Joel I. Papernik

cc: Securities and Exchange Commission (Tabitha Akins, Staff Accountant, Division of Corporation Finance)
Cyclacel Pharmaceuticals, Inc. (Messrs. Spiro Rombotis and Paul McBarron)