

April 24, 2012

Via EDGAR and by Federal Express

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Mail Stop 3561
Washington, D.C. 20549

**Re: Cyclacel Pharmaceuticals, Inc.
Post-Effective Amendment No. 1 to Form S-3 on Form S-1
Filed on April 4, 2012
File No. 333-173291**

Ladies and Gentleman:

On behalf of Cyclacel Pharmaceuticals, Inc. (the “**Company**”), we hereby file with the Securities and Exchange Commission (the “**Commission**”) a Post-Effective Amendment No. 2 to Form S-3 on Form S-1 (File No. 333-173291) as initially filed with the Commission on April 4, 2012 (the “**Post-Effective Amendment**”). We are also delivering two clean courtesy copies of the Amendment to the attention of Karen Ubell, Esq. of the Commission.

Set forth below is the Company’s response to the comments provided by the staff (the “**Staff**”) of the Commission by way of a letter (the “**Comment Letter**”) dated April 11, 2012, from Jeffrey Riedler, Esq., Assistant Director of the Division of Corporation Finance. 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.

Incorporation by Reference, page 50

- 1. We note that your registration statement incorporates by reference materials from your Annual Report on Form 10-K for the year ended December 31, 2011. This filing does not contain the information required by Part III of Form 10-K. We will not be in a position to accelerate the effectiveness of your registration statement until you amend your Form 10-K to include the Part III information or have provided the information in a definitive proxy statement.**

Response: In response to the Staff’s comment, the Company incorporated by reference the definitive proxy statement filed with the Securities and Exchange Commission on April 19, 2012, which contains the information required by Part III of Form 10-K.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

BOSTON | WASHINGTON | NEW YORK | STAMFORD | LOS ANGELES | PALO ALTO | SAN DIEGO | LONDON

-
- 2. You have included language incorporating by reference reports and documents you subsequently file pursuant to Section 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act or Exchange Act after the date of the prospectus. Forward incorporation is not permissible for registration statement on Form S-1. Please amend your filing to delete this paragraph.**

Response: In response to the Staff’s comment, the Company deleted the paragraph that referenced future incorporation of reports and documents by reference.

The Company hereby acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in its filings;
- Staff comments or changes to disclosure to Staff comments do not foreclose the Commission from taking any action with respect to the filings; 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.

Please call Avisheh Avini at (212) 692-6200 or the undersigned at (212) 692-6806 with any comments or questions and please send a copy of any written comments to the following parties:

Avisheh Avini, Esq.
Merav Gershtenman, Esq.
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
666 Third Avenue

New York, NY 10017
Phone: (212) 935-3000
Fax: (212) 983-3115

Very truly yours,

/s/ Merav Gershtenman
Merav Gershtenman

cc: Securities and Exchange Commission (Jeffrey Riedler, Esq., Assistant Director)

Cyclacel Pharmaceuticals, Inc. (Spiro Rombotis, President and Chief Executive Officer; Paul McBarron, Chief Operating Officer, Chief Financial Officer and Executive Vice President, Finance)