

June 11, 2010

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/A
Filed on May 27, 2010
File Number 333-140034**

Ladies and Gentleman:

On behalf of Cyclacel Pharmaceuticals, Inc. (the “**Company**”), we hereby file with the Securities and Exchange Commission (the “**Commission**”) an amendment to the Post-effective Amendment No. 1 to Form S-3 on Form S-1/A, as initially filed with the Commission on May 27, 2010. We are also delivering five clean and marked complete courtesy copies of the Amendment to the attention of Brian Pitko, Esq. of the Commission.

Set forth below are the Company’s responses to the Commission’s comments provided by a letter (the “**Comment Letter**”) dated June 9, 2010, from Jeffrey P. 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 of Documents by Reference, page 58

1. Please revise your prospectus to incorporate by reference the Current Reports on Form 8-K filed on January 7, 2010, January 11, 2010, January 13, 2010, January 21, 2010, January 25, 2010, January 27 2010 and March 16, 2010. See Item 12 of Form S-1.

Response: We have amended “Incorporation of Documents by Reference” to include the foregoing Current Reports on Form 8-K.

* * *

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

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

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

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Securities and Exchange Commission

June 11, 2010

Page 2

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Very truly yours,

/s/ Joel I. Papernik

Joel I. Papernik

cc: Securities and Exchange Commission (Jeffrey P. 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)