

November 29, 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.
Registration Statement on Form S-1
Filed on November 5, 2010
File Number 333-170421**

Ladies and Gentleman:

On behalf of Cyclacel Pharmaceuticals, Inc. (the “**Company**”), we hereby file with the Securities and Exchange Commission (the “**Commission**”) Amendment No. 1 (the “**Amendment**”) to the Registration Statement on Form S-1 (File No. 333-170421) filed with the Commission on November 5, 2010 (the “**Registration Statement**”). We are also delivering five clean and marked complete courtesy copies of the Amendment to the attention of Jeffrey P. Riedler, 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 November 16, 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.

General

1. We note that this transaction relates to the resale of up to a total of 18,727,183 shares of common stock by the selling stockholders, which shares are comprised partly of 2,080,803 shares issuable upon exercise of the Option Warrants issuable upon exercise of the Options. The company is not eligible to register the 2,080,803 shares of common stock issuable upon exercise of the Options, as they are not outstanding or issuable upon the exercise of an outstanding security. Please remove these shares from the registration statement.

Response: In response to the Commission’s comment, the Company has removed the shares of common stock issuable upon exercise of the Option Warrants from the Registration Statement.

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

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2. Please file, and include in your Exhibit Index as Exhibit 5.1, a legal opinion in compliance with Item 601(b)(5) of Regulation S-K.

Response: Our firm's legal opinion has been filed as Exhibit 5.1 to the Registration Statement in compliance with Item 601(b)(5) of Regulation S-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:

Joel I. Papernik, Esq.
Todd E. Mason, Esq.
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
666 Third Avenue
New York, NY 10017
Phone: (212) 935-3000
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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)