

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

June 16, 2010

Spiro Rombotis Chief Executive Officer Cyclacel Pharmaceuticals, Inc. 200 Connell Drive, Suite 1500 Berkeley Heights, NJ 07922

> Re: Cyclacel Pharmaceuticals, Inc. Registration Statement on Form S-1 Filed June 11, 2010 File Number: 333-167470

Dear Mr. Rombotis:

We have limited our review of your filing to those issues we have addressed in our comment.

Please respond to this letter by amending your registration statement and providing the requested information. Where you do not believe our comment applies to your facts and circumstances or do not believe that an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

Form S-1

Incorporation of Documents by Reference, page 58

1. We note that you filed a Current Report on Form 8-K on June 14, 2010. Under Item 12 of Form S-1 you must incorporate by reference all reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of your fiscal year. Please revise your registration statement to incorporate by reference your Form 8-K filed June 14, 2010.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and all applicable Securities Act rules. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made. Spiro Rombotis Cyclacel Pharmaceuticals, Inc. June 16, 2010 Page 2

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Bryan Pitko at (202) 551-3203 or Suzanne Hayes at (202) 551-3675 with any questions. In this regard, please free to contact me at (202) 551-3715.

Sincerely,

Jeffrey P. Riedler Assistant Director

cc: Joel I. Papernik, Esq. Todd E. Mason, Esq. Avisheh Avini, Esq. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. 666 Third Avenue New York, New York 10017