



DIVISION OF  
CORPORATION FINANCE

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

January 29, 2013

Via E-Mail

Rainer Erdtmann  
Vice President, Finance & Administration  
Pharmacyclics, Inc.  
995 E. Arques Avenue  
Sunnyvale, CA 94085-4521

**Re: Pharmacyclics, Inc.  
Form 10-K for the fiscal year ended June 30, 2012  
Filed September 5, 2012  
File No. 000-26658**

Dear Mr. Erdtmann:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Item 1. Business  
Ibrutinib Clinical Development Update, page 5

1. We note your disclosure that Grade 3 and Grade 4 hematologic events were reported in your single agent Phase Ib/II CLL/SLL study. Please provide us with proposed expanded disclosure for future filings that provides a brief description of these events.

Item 1. Business  
Ibrutinib Patents, page 11  
PCI-27483 Patents, page 13  
Patents, page 14

2. We note in your disclosure that you provide a "projected duration of [patent] coverage" for each product candidate. Please provide us with proposed expanded disclosure for future filings that provides a range of expirations of your material issued patents for each product candidate.

Collaborations and Other Agreements

Cooperative Research and Development Agreement with the National Cancer Institute, page 18

3. We note that you disclose that you entered into a five-year cooperative research and development agreement in August 2011 in which the NCI's Division of Cancer Treatment and Diagnosis plans to sponsor Phase I through Phase III trials of ibrutinib in various hematologic malignancies. You also disclose on page 2 that ibrutinib is currently initiating Phase III studies in hematologic malignancies. Please provide us with proposed expanded disclosure that clarifies whether this Phase III study is sponsored by the NCI's Division of Cancer Treatment and Diagnosis and provides the material terms of this agreement. Please file a copy of this agreement as an exhibit. Alternatively, please provide us with an analysis that supports your belief that you are not substantially dependent on this agreement.

Acquired Products

Celera Corporation, page 18

4. Please provide us with proposed expanded disclosure regarding the material terms of your agreement with Celera Corporation that specifies the amount of royalties payable expressed as a percentage or range within 10% (i.e. single digits, teens, twenties, etc.) and the term and termination provisions.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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.

Rainer Erdtmann  
Pharmacyclics, Inc.  
January 29, 2013  
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Please contact Amy Reischauer at (202) 551-3793, Jennifer Riegel at (202) 551-3575 or me at (202) 551-3715 with any questions.

Sincerely,

/s/ Jennifer Riegel for

Jeffrey P. Riedler  
Assistant Director