

Mail Stop 6010

April 12, 2007

Thomas B. King  
President and Chief Executive Officer  
Alexza Pharmaceuticals, Inc.  
1020 East Meadow Circle  
Palo Alto, California 94303

**Re: Alexza Pharmaceuticals, Inc.  
Registration Statement on Form S-3  
Filed March 30, 2007  
File No. 333-141724**

Dear Mr. King:

We have limited our review of your filing to the following comments. When you have complied with our comments on these filings, we will act upon any request for acceleration of the effective date of the registration statement and, pursuant to delegated authority, grant acceleration of the effective date.

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 that they have provided all information investors require for an informed investment decision. 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.

Selling Stockholders, page 19

1. Please expand the discussion to provide additional information concerning the funding agreement including its material terms, the price paid for the warrant, the exercise price of the warrant, and any other material terms. We may have additional comments.

\* \* \* \*

General

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

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. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Please contact John L. Krug, Staff Attorney at (202) 551-3862 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler  
Assistant Director

cc: Brent D. Fassett, Esquire  
Cooley Godward Kronish LLP  
380 Interlocken Crescent, Suite 900  
Broomfield, Colorado 80021