



DIVISION OF
CORPORATION FINANCE

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

May 11, 2012

Via E-mail

Vipin K. Garg, Ph.D
President and Chief Executive Officer
Tranzyme, Inc.
5001 South Miami Boulevard, Suite 300
Durham, NC 27703

**Re: Tranzyme, Inc.
Registration Statement on Form S-3
Filed May 7, 2012
File No. 333-181215**

Dear Dr. Garg:

We have limited our review of your registration statement to those issues we have addressed in our comments.

Please respond to this letter by amending your registration statement and providing the requested information. Where you do not believe our comments apply to your facts and circumstances or do not believe 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 these comments, we may have additional comments.

Incorporation by Reference, page 41

1. Please revise your disclosure to 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 2011. Specifically, this should include your current report on Form 8-K as filed on May 8, 2012 and, if the registration statement has not been made effective prior to filing of your Form 10-Q for the quarter ended March 31, 2012, your Quarterly Report on Form 10-Q. See Question 123.05 of the Securities Act Forms Compliance and Disclosure Interpretations.

Exhibit Index, Page II-7

2. A form of indenture is required to be on file at time of effectiveness of the registration statement. Please file by pre-effective amendment a form of indenture as an exhibit to your registration statement.

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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 Act of 1933 and all applicable Securities 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.

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 Karen Ubell at (202) 551-3873 or me at (202) 551-3715 with any questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey Riedler
Assistant Director