

Mail Stop 4720

April 12, 2010

Via Facsimile and U.S. Mail

Russell H. Plumb
President and Chief Executive Officer
Inhibitex, Inc.
9005 Westside Parkway
Alpharetta, GA 30004

**Re: Inhibitex, Inc.
Registration Statement on Form S-3
Filed March 30, 2010
File No. 333-165786**

Dear Mr. Plumb:

This is to advise you that we have limited our review of the above information statement to the issues identified below. We will make no further review of this filing.

Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. After reviewing this information, we may or may not raise additional comments.

Incorporation by Reference, page 18

1. We note that your registration statement incorporates by reference your Form 10-K Annual Report for the fiscal year ended December 31, 2009, which was filed on March 26, 2010. However, that Form 10-K does not include the disclosure required by Part III of the form. Instead, it incorporates by reference such disclosure from information that will be contained in your 2010 annual proxy statement to shareholders. Accordingly, and consistent with Compliance and Disclosure Interpretation 123.01 promulgated by the staff of the Division of Corporation Finance, you must either file an amended Form 10-K that includes the disclosure required by Part III of Form 10-K or file your definitive proxy statement, including the disclosure required by Part III of Form 10-K, before the above-referenced registration statement may go effective.

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As appropriate, please revise your information statement in response to these comments. You may wish to provide us with marked copies of the revised document to expedite our review. Please furnish a response letter that keys your responses to our comments. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR under the form type label CORRESP. Please understand that we may have additional comments after reviewing your amendment and response to our comment.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments in the filings reviewed by the staff 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.

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 our review of your filing or in response to our comments on your filing.

Please contact Scot Foley at (202) 551-3383 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: David S. Rosenthal, Esq.
Dechert LLP
1095 Avenue of the Americas
New York, New York 10036