

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

October 21, 2011

Via E-mail
John M. Holliman, III
Executive Chairman
Capstone Therapeutics Corp.
1275 West Washington Street, Suite 101
Tempe, AZ 85281

Re: Capstone Therapeutics Corp.

Form 10-K

Filed March 29, 2011 File No. 001-33560

Dear Mr. Holliman:

We have reviewed your filing and have the following comment.

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 comment applies to your facts and circumstances, please tell us why in your response.

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

<u>Item 1. Business</u> Patents, Licenses and Proprietary Rights, page 6

1. Please revise your disclosure to expand your discussion of your agreements with University of Texas and Arizona State University to describe for each the termination provisions of the agreements and the royalty rates due on sales of future products and all other material payments made or required to be made pursuant to the terms of each agreement. Further, please file a copy of the license agreement with Washington University that you have assumed and revise your disclosure to expand your discussion of your agreement with Washington University to include the termination provisions of the agreement and the license maintenance payments made to date and payable annually and the royalty rate. Alternatively, please provide us with a detailed analysis which supports your conclusion that your business is not substantially dependent on this license agreement.

John M. Holliman, III Capstone Therapeutics Corp. October 21, 2011 Page 2

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.

Please contact Karen Ubell, Staff Attorney, at (202) 551-3873, Jennifer Riegel, Special Counsel, at (202) 551-3575 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jennifer Riegel for

Jeffrey Riedler Assistant Director