June 27, 2008

C. Randal Mills, Ph.D.
President and Chief Executive Officer
Osiris Therapeutics, Inc.
7015 Albert Einstein Drive
Columbia, MD 21046

Re: Osiris Therapeutics, Inc.
Preliminary Merger Proxy Statement on Schedule 14A
Filed June 12, 2008
File No. 1-32966

Dear Dr. Mills:

This is to advise you that we have limited our review of the above referenced proxy statement to only the issues identified below.

Schedule 14A

1. Please provide the reports filed under the Exchange Act, or incorporate them by reference, as required by Item 14(c)(1) and (2) of Schedule 14A.

* * *

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with a marked copy of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 Exchange Act of 1934 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.

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 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.

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.

You may contact Ibolya Ignat at (202) 551-3656 or Joel Parker at (202) 551-3651 if you have questions regarding comments on the financial statements and related matters. Please contact Song Brandon at (202) 551-3621, or me at (202) 551-3710 with any other questions.

Sincerely,

Jeffrey Riedler Assistant Director

cc: Douglas Fox, Esq.
Ballard Spahr Andrews & Ingersoll LLP
300 East Lombard Street
18th Floor
Baltimore, MD 21202