Via Facsimile and U.S. Mail Mail Stop 6010

December 18, 2008

Richard W. Hunt Chief Financial Officer Osiris Therapeutics, Inc. 7015 Albert Einstein Drive Columbia, MD 21046

Re: Osiris Therapeutics, Inc. Form 10-K for the Year Ended December 31, 2007 Form 10-Q for the Quarterly Period Ended June 30, 2008 File Number: 001-32966

Dear Mr. Hunt:

We have completed our review of your above Forms 10-K and 10-Q and have no further comments at this time.

Sincerely,

Joel Parker Accounting Branch Chief