Via Facsimile and U.S. Mail Mail Stop 6010

February 27, 2006

Mr. Vikas Sinha Senior Vice President and Chief Financial Officer Alexion Pharmaceuticals, Inc. 352 Knotter Drive Cheshire, CT 06410

Re: Alexion Pharmaceuticals, Inc Form 10-K for the Fiscal Period Ended July 31, 2005 File No. 000-27756

Dear Mr. Sinha:

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

Sincerely,

Jim Atkinson

Accounting Branch Chief