



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

DIVISION OF  
CORPORATION FINANCE

March 4, 2011

Mr. Julian Heslop  
Chief Financial Officer  
GlaxoSmithKline plc  
980 Great West Road  
Brentford, TW8 9GS  
England

**Re: GlaxoSmithKline plc  
Form 20-F for Fiscal Year Ended December 31, 2009  
File No. 001-15170**

Dear Mr. Heslop:

We have completed our review of your Form 20-F and related filings and have no further comments at this time.

Sincerely,

Melissa Rocha  
Accounting Branch Chief