

GLAXOSMITHKLINE PLC  
Form 6-K  
January 20, 2010

**FORM 6-K**

**SECURITIES AND EXCHANGE COMMISSION  
Washington D.C. 20549**

**Report of Foreign Issuer**

**Pursuant to Rule 13a-16 or 15d-16 of  
the Securities Exchange Act of 1934**

For period ending January 20, 2010

**GlaxoSmithKline plc**  
(Name of registrant)

**980 Great West Road, Brentford, Middlesex, TW8 9GS**  
(Address of principal executive offices)

Indicate by check mark whether the registrant files or  
will file annual reports under cover Form 20-F or Form 40-F

Form 20-F  Form 40-F

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Indicate by check mark whether the registrant by furnishing the  
information contained in this Form is also thereby furnishing the  
information to the Commission pursuant to Rule 12g3-2(b) under the  
Securities Exchange Act of 1934.

Yes  No

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**Notification of Transactions of Directors, Persons Discharging Managerial Responsibility or Connected Persons**

The Administrators of the GlaxoSmithKline Annual Investment Plan notified the Company and the under mentioned persons on 20 January 2010 of an increase in their interests in Ordinary shares, purchased at a price of £12.78 per share on 14 January 2010, following the re-investment of the dividend paid to shareholders on 7 January 2010:-

Dr M M Slaoui	279
Mr M Dunoyer	136
Dr D Pulman	208

This notification relates to transactions notified in accordance with Disclosure and Transparency Rule 3.1.4R(1)(a).

S M Bicknell  
Company Secretary

20 January 2010

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorised.

**GlaxoSmithKline plc**  
(Registrant)

Date: January 20, 2010

By: VICTORIA WHYTE

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Victoria Whyte  
Authorised Signatory for and on  
behalf of GlaxoSmithKline plc