

SMITH & NEPHEW PLC  
Form 6-K  
September 30, 2016

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

Report of Foreign Private Issuer

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

September 30, 2016

Commission File Number 001-14978

SMITH & NEPHEW plc  
(Registrant's name)

15 Adam Street  
London, England WC2N 6LA  
(Address of registrant's 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 <input checked="" type="checkbox"/> | Form 40-F <input type="checkbox"/> |
| ---                                           | ---                                |

[Indicate by check mark if the registrant is submitting the Form 6-K in  
paper as permitted by Regulation S-T Rule 101(b)(1).]

|                              |                                        |
|------------------------------|----------------------------------------|
| Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| ---                          | ---                                    |

[Indicate by check mark if the registrant is submitting the Form 6-K in  
paper as permitted by Regulation S-T Rule 101(b)(7).]

|                              |                                        |
|------------------------------|----------------------------------------|
| Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| ---                          | ---                                    |

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

|                              |                                        |
|------------------------------|----------------------------------------|
| Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| ---                          | ---                                    |

If "Yes" is marked, indicate below the file number assigned to the  
registrant in connection with Rule 12g3-2 (b) : 82- n/a.  
30 September 2016

Smith & Nephew plc (the "Company")

#### Transaction in Own Shares

The Company today purchased 300,000 of its Ordinary Shares of US 20¢ each through J.P. Morgan Securities, in accordance with the authority granted by shareholders at the Company's Annual General Meeting on 14 April 2016. These shares have been purchased as part of the \$300 million buy-back programme, the purpose for which is to reduce the Company's share capital, as announced on 8 August 2016. Details of the relevant purchase transactions are set out below:

|                               |                                               |
|-------------------------------|-----------------------------------------------|
| Description of Shares:        | Smith & Nephew Ordinary Shares of US 20¢ each |
| Number of Shares repurchased: | 300,000                                       |
| Average price paid per Share: | 1,238.8004p                                   |
| Highest price paid per Share: | 1,244.0000p                                   |
| Lowest price paid per Share:  | 1,231.0000p                                   |
| Date of transaction:          | 30 September 2016                             |
| Broker:                       | J.P. Morgan Securities plc                    |

The Company intends to hold these shares in Treasury.

Following the purchase of these shares, the Company holds 27,735,122 of its shares in Treasury. The Company's issued share capital, with one voting right per share consists of 885,729,417 Ordinary Shares of US20¢ each (excluding treasury shares). This is the figure which should be used by shareholders as the denominator when determining whether they are required to notify their interest in, or a change to their interest in, the Company under the FCA's Disclosure Guidance and Transparency Rules.

These purchases were made by J.P. Morgan Securities plc on behalf of the Company and a full breakdown of the individual trades is attached to this announcement.

[http://www.rns-pdf.londonstockexchange.com/rns/4217L\\_-2016-9-30.pdf](http://www.rns-pdf.londonstockexchange.com/rns/4217L_-2016-9-30.pdf)

This announcement is made in accordance with the requirements of LR 12.4.6.

Susan Swabey  
Company Secretary  
Smith & Nephew plc  
Tel: 01923 477320

#### 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 authorized.

Smith & Nephew Plc  
(Registrant)

Date: September 30, 2016

By: /s/ Susan Swabey

Susan Swabey  
Company Secretary