

Transaction in Own Shares

September 11, 2013 – Shire plc (LSE: SHP, NASDAQ: SHPG) (the “Company”) announces that, in accordance with the authority granted by shareholders at the Company’s Annual General Meeting on April 30, 2013, it purchased 12,700 of its ordinary shares of 5 pence each (“Ordinary Shares”) on September 10, 2013 through both direct purchases of Ordinary Shares, and through the purchase of Ordinary Shares underlying ADRs. The highest and lowest price paid for the directly acquired Ordinary Shares was 2475.00 pence per share and 2466.00 pence per share respectively, and for those Ordinary Shares acquired through the purchase of ADRs was 3899.00 cents per share and 3889.00 cents per share respectively.

The purchased shares will be held as treasury shares. Following the above purchase, the Company holds 9,704,932 Ordinary Shares as treasury shares and has 553,183,295 Ordinary Shares in issue (excluding treasury shares).

The purchases were made by an independent third party which makes its trading decisions independently of, and uninfluenced by, the Company. The independence of the third party enables the Company to continue to purchase Ordinary Shares (including Ordinary Shares underlying ADRs) during close periods and other prohibited periods, should they arise. The third party has been appointed by the Company to make purchases to December 31, 2013.

For further information please contact:

Investor Relations

Eric Rojas

erojas@shire.com

+1 781 482 0999

Sarah Elton-Farr

seltonfarr@shire.com

+44 1256 894157

NOTES TO EDITORS

Shire enables people with life-altering conditions to lead better lives.

Our strategy is to focus on developing and marketing innovative specialty medicines to meet significant unmet patient needs.

We provide treatments in Neuroscience, Rare Diseases, Gastrointestinal, Internal Medicine and Regenerative Medicine and we are developing treatments for symptomatic conditions treated by specialist physicians in other targeted therapeutic areas.

www.shire.com