

Press Release



Shire and Cincinnati Children's Establish Rare Disease Research Collaboration

Lexington, MA and Cincinnati, OH – March 26, 2015 – Shire plc (LSE: SHP, NASDAQ: SHPG) and Cincinnati Children's Hospital Medical Center today announced a three-year, broad research collaboration for rare diseases. The goal of the collaboration is to discover and develop novel therapies to treat rare diseases with high unmet medical need combining Shire's development and commercialization capabilities with Cincinnati Children's research expertise. As a nationally ranked hospital, Cincinnati Children's has expertise in many fields of research that align with Shire's therapeutic areas of focus including, rare diseases, gastroenterology, nephrology and neurology. The partnership underscores Shire's long-term commitment to bringing innovative therapies to patients living with rare diseases around the world.

"Shire is pleased to enter into this innovative collaboration with Cincinnati Children's, which joins together leaders in industry and academia to advance pioneering research from the lab to the clinic," said Dr. Philip J. Vickers, Global Head of Research and Development, Shire. "Shire has a deep commitment to patients with rare diseases, and our developmental expertise, combined with Cincinnati Children's research capabilities, should enable an acceleration of our discovery and development efforts."

"We are very excited to partner with Shire in this capacity as we strive to change the outcome for children with rare and complex diseases," said Margaret Hostetter, MD, Chief Medical Officer of Cincinnati Children's and Director, Cincinnati Children's Research Foundation. "Cincinnati Children's full spectrum of research capabilities—basic, clinical and translational—coupled with Shire's drug development expertise makes for a very powerful partnership that we hope will have an impact on patients around the world."

Under the terms of the agreement, Shire will make an initial upfront payment to Cincinnati Children's and will have the opportunity to fund and offer scientific support to selected research programs. The emphasis will be on opportunities that have the potential to deliver a development candidate in less than three years from project initiation. Following the completion of each program, Shire will have an exclusive option to enter into a licensing agreement. Shire will be responsible for any further development and commercialization of development candidates arising from the collaboration. The agreement, negotiated by Shire and Cincinnati

Children's Center for Technology Commercialization, represents a flexible model of collaboration between industry and academia.

For further information please contact:

Investor Relations

For Shire:

Sarah Elton-Farr seltonfarr@shire.com +44 1256 894157

Media

For Shire:

Justine O'Malley jomalley@npsp.com +1 908 375 7665

For Cincinnati Children's:

Mike Pistone michael.pistone@cchmc.org +1 814 403 7218

NOTES TO EDITORS

About Shire

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 focus on providing treatments in Rare Diseases, Neuroscience, Gastrointestinal and Internal Medicine and we are developing treatments for symptomatic conditions treated by specialist physicians in other targeted therapeutic areas, such as Ophthalmics.

www.shire.com

About Cincinnati Children's

Cincinnati Children's Hospital Medical Center ranks third in the nation among all Honor Roll hospitals in U.S. News and World Report's 2014 Best Children's Hospitals. It is also ranked in the top 10 for all 10 pediatric specialties. Cincinnati Children's, a non-profit organization, is one of the top three recipients of pediatric research grants from the National Institutes of Health, and a research and teaching affiliate of the University of Cincinnati College of Medicine. The medical center is internationally recognized for improving child health and transforming delivery of care through fully integrated, globally recognized research, education and innovation. Additional information can be found at www.cincinnatichildrens.org. Connect on the Cincinnati Children's blog, via Facebook and on Twitter.

THE "SAFE HARBOR" STATEMENT UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

Statements included in this announcement that are not historical facts are forward-looking statements. Such forward-looking statements involve a number of risks and uncertainties and are subject to change at any time. In the event such risks or uncertainties materialize, Shire's results could be materially adversely affected. The risks and uncertainties include, but are not limited to, that:

- Shire's products may not be a commercial success;
- product sales from ADDERALL XR and INTUNIV are subject to generic competition;
- the failure to obtain and maintain reimbursement, or an adequate level of reimbursement, by third-party payers in a timely manner for Shire's products may affect future revenues, financial condition and results of operations;
- Shire conducts its own manufacturing operations for certain of its products and is reliant on third party contract manufacturers to manufacture other products and to provide goods and services. Some of the Shire's products or ingredients are only available from a single approved source for manufacture. Any disruption to the supply chain for any of the Shire's products may result in Shire being unable to continue marketing or developing a product or may result in Shire being unable to do so on a commercially viable basis for some period of time;
- the manufacture of Shire's products is subject to extensive oversight by various regulatory agencies. Regulatory approvals or interventions associated with changes to manufacturing sites, ingredients or manufacturing processes could lead to significant delays, an increase in operating costs, lost product sales, an interruption of research activities or the delay of new product launches;
- Shire has a portfolio of products in various stages of research and development. The successful development of these products is highly uncertain and requires significant expenditures and time, and there is no guarantee that these products will receive regulatory approval;
- the actions of certain customers could affect Shire's ability to sell or market products profitably. Fluctuations in buying or distribution patterns by such customers can adversely affect Shire's revenues, financial conditions or results of operations;
- investigations or enforcement action by regulatory authorities or law enforcement agencies relating to Shire's activities in the highly regulated markets in which it operates may result in significant legal costs and the payment of substantial compensation or fines;
- adverse outcomes in legal matters and other disputes, including Shire's ability to enforce and defend patents and other intellectual property rights required for its business, could have a material adverse effect on Shire's revenues, financial condition or results of operations;
- Shire faces intense competition for highly qualified personnel from other companies and organizations. Shire is undergoing a corporate reorganization and was the subject of an unsuccessful acquisition proposal and the consequent uncertainty could adversely affect Shire's ability to attract and/or retain the highly skilled personnel needed for Shire to meet its strategic objectives;
- failure to achieve Shire's strategic objectives with respect to the acquisition of NPS Pharmaceuticals, Inc. may adversely affect Shire's financial condition and results of operations;

and other risks and uncertainties detailed from time to time in Shire's filings with the US Securities and Exchange Commission, including its most recent Annual Report on Form 10-K.