



THE HARRINGTON PROJECT
FOR DISCOVERY & DEVELOPMENT

Harrington Discovery Institute

 University Hospitals | Cleveland Ohio

**Takeda and Harrington Discovery Institute at University Hospitals
Announce a Collaboration to Advance the Development of Rare Disease Therapeutics**

Osaka, Japan and Cleveland, Ohio, USA – 27 April 2017 – Takeda Pharmaceutical Company Limited ([TSE: 4502](#)), and Harrington Discovery Institute at University Hospitals in Cleveland, Ohio have announced a multi-year collaboration to accelerate breakthrough therapeutic discoveries in rare diseases.

A first of a kind partnership for Harrington Discovery Institute with a major pharmaceutical company, this collaboration with Takeda will build on Harrington Discovery Institute's established operating model to create a new program specifically for the advancement of medicines for rare diseases. At the same time, this collaboration will complement Takeda's strategic R&D focus in its therapeutic areas of oncology, gastroenterology and central nervous system disorders. The new Harrington program will focus on M.D. and Ph.D. researchers from across the United States, developing disruptive and transformative research, which shows promise for translation into novel treatments.

"Takeda is committed to supporting and developing transformative therapies for social benefit – so are we," said Jonathan S. Stamler, MD, President, Harrington Discovery Institute and the Robert S. and Sylvia K. Reitman Family Foundation Distinguished Chair in Cardiovascular Innovation at University Hospitals and Case Western Reserve University School of Medicine. "We are delighted to see Takeda's confidence in us to advance early stage discoveries in a major area of unmet medical need. Through this partnering model that bridges academia and industry, we will jointly leverage our financial and human capital to accelerate the pace of cures for rare diseases."

Researchers in the new program will have access to grant funding from the Harrington Discovery Institute and hands-on drug development capability and project management from experts in its Innovation Support Center. In addition to those resources, researchers will also have access to Takeda's internal research and development experts.

"This collaboration is another example of how Takeda is focused on fostering partnerships between academia and industry and its increasing commitment to the development of medicines in rare diseases, particularly in our therapeutic areas of focus in oncology, gastroenterology and central nervous system disorders," said Daniel Curran, MD, Head of the Center for External Innovation, Takeda. "We believe Harrington Discovery Institute has a unique structure that is immensely helpful to academic researchers who are developing novel therapeutics that can result in significant impact for patients. Our collaboration demonstrates a new way of business that is driven by a shared vision and mission."

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Harrington Discovery Institute

The Harrington Discovery Institute at University Hospitals in Cleveland, Ohio – part of The Harrington Project for Discovery & Development – aims to advance medicine and society by enabling our nation’s most inventive physician-scientists to turn their discoveries into medicines that improve human health. The institute was created in 2012 with a \$50 million founding gift from the Harrington family and instantiates the commitment they share with University Hospitals to a Vision for a ‘Better World’.

The Harrington Project for Discovery & Development

The Harrington Project for Discovery & Development (The Harrington Project), founded in late February 2012 by the Harrington Family and University Hospitals of Cleveland, is a \$300 million national initiative built to bridge the translational valley of death. It includes the Harrington Discovery Institute and BioMotiv, a for-profit, mission-aligned drug development company that accelerates early discoveries into medicines for benefit of society.

For more information about The Harrington Project and Harrington Discovery Institute, visit: HarringtonDiscovery.org.

University Hospitals

Founded in 1866, University Hospitals serves the needs of over 1 million patients per year through an integrated network of 18 hospitals, more than 40 outpatient health centers and 200 physician offices in 15 counties throughout northern Ohio. The system’s flagship academic medical center, University Hospitals Cleveland Medical Center, located on a 35-acre campus in Cleveland’s University Circle, is affiliated with Case Western Reserve University School of Medicine. The main campus also includes University Hospitals Rainbow Babies & Children's Hospital, ranked among the top children’s hospitals in the nation; University Hospitals MacDonald Women's Hospital, Ohio's only hospital for women; and University Hospitals Seidman Cancer Center, part of the NCI-designated Case Comprehensive Cancer Center. UH is home to some of the most prestigious clinical and research programs in the nation, including cancer, pediatrics, women's health, orthopedics, radiology, neuroscience, cardiology and cardiovascular surgery, digestive health, dermatology, transplantation and urology. UH Cleveland Medical Center is perennially among the highest performers in national ranking surveys, including “America’s Best Hospitals” from U.S. News & World Report. UH is also home to Harrington Discovery Institute at University Hospitals – part of The Harrington Project for Discovery & Development. UH is the second largest employer in northern Ohio with 26,000 employees. For more information, go to UHhospitals.org.

About Takeda Pharmaceutical Company

Takeda Pharmaceutical Company Limited is a global, research and development-driven pharmaceutical company committed to bringing better health and a brighter future to patients by translating science into life-changing medicines. Takeda focuses its R&D efforts on oncology, gastroenterology and central nervous system therapeutic areas plus vaccines. Takeda conducts

R&D both internally and with partners to stay at the leading edge of innovation. New innovative products, especially in oncology and gastroenterology, as well as Takeda's presence in Emerging Markets, are currently fueling the growth of Takeda. More than 30,000 Takeda employees are committed to improving quality of life for patients, working with Takeda's partners in health care in more than 70 countries. For more information, visit <http://www.takeda.com/news>.

Takeda's Forward-Looking Statements

This press release contains "forward-looking statements." Forward-looking statements include all statements other than statements of historical fact, including plans, strategies and expectations for the future, statements regarding the expected timing of filings and approvals relating to the transaction, the expected timing of the completion of the transaction, the ability to complete the transaction or to satisfy the various closing conditions, future revenues and profitability from or growth or any assumptions underlying any of the foregoing. Statements made in the future tense, and words such as "anticipate," "expect," "project," "continue," "believe," "plan," "estimate," "pro forma," "intend," "potential," "target," "forecast," "guidance," "outlook," "seek," "assume," "will," "may," "should," and similar expressions are intended to qualify as forward-looking statements. Forward-looking statements are based on estimates and assumptions made by management that are believed to be reasonable, though they are inherently uncertain and difficult to predict. Investors and security holders are cautioned not to place undue reliance on these forward-looking statements.

Forward-looking statements involve risks and uncertainties that could cause actual results or experience to differ materially from that expressed or implied by the forward-looking statements. Some of these risks and uncertainties include, but are not limited to: required regulatory approvals for the transaction may not be obtained in a timely manner, if at all; the conditions to closing of the transaction may not be satisfied; competitive pressures and developments; applicable laws and regulations; the success or failure of product development programs; actions of regulatory authorities and the timing thereof; changes in exchange rates; and claims or concerns regarding the safety or efficacy of marketed products or product candidates in development.

The forward-looking statements contained in this press release speak only as of the date of this press release, and neither University Hospitals, Harrington Discovery Institute, nor Takeda undertake any obligation to revise or update any forward-looking statements to reflect new information, future events or circumstances after the date of the forward-looking statement. If one or more of these statements is updated or corrected, investors and others should not conclude that additional updates or corrections will be made.

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