





News Release

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GARDP, Eisai and Takeda announce partnership in the search for new antibiotics

First multi-actor partnership tests chemical compounds for antibacterial activity

The Global Antibiotic Research and Development Partnership (GARDP), Eisai Co., Ltd. (TSE: 4523) ("Eisai") and Takeda Pharmaceutical Company Limited (TSE: 4502) ("Takeda") have signed an agreement for GARDP to access and screen components of Eisai and Takeda's chemical libraries. Both libraries will be tested by the Institut Pasteur Korea in the hope of discovering novel compounds with antibacterial activity. This multipartner agreement supports GARDP's efforts to tackle serious bacterial infections by developing antibiotics while endeavouring to ensure their sustainable access.

With few antibiotics in development, antimicrobial resistance is a major and rapidly growing global public health concern. Around 700,000 people die of drug-resistant infections every year. Serious bacterial infections, and in particular Gram-negative bacterial infections, have been identified by the World Health Organization (WHO) as a global public health priority.

The compounds that will be screened have emerged from Eisai and Takeda's latest medicinal chemistry efforts and have never been screened for antibacterial activity. They will be tested against bacteria identified as a critical priority for research and development of new antibiotics in WHO's global priority pathogen list.² Through this screening, GARDP seeks to identify novel compounds suitable for further optimization and development.

"GARDP is very excited about this partnership. Not only can partnerships like this accelerate the discovery of new antibiotics, they can also support the pharmaceutical sector in staying engaged in antibiotic R&D," said Dr. Seamus O'Brien, Research and Development Director at GARDP. "Overcoming antibacterial resistance is key to achieve universal health coverage. GARDP's approach allows us to develop a drug from early exploratory to preclinical and clinical studies all the way to patients."

"Eisai strongly identifies with GARDP's efforts to discover novel antibiotics to treat drug-resistant bacterial infections which have become a threat to human beings and are pleased to provide our compound library for screening. We sincerely hope new medicines will be discovered through this partnership to realize a world in which lives are no longer lost to drug-resistant bacteria," said Dr. Kappei Tsukahara, Senior Group Officer, Head of Human Health Care Data Creation Center, Head of Tsukuba Research Laboratories at Eisai.

"Takeda is delighted to contribute to this creative partnership and extend our commitment to promoting the discovery of novel treatments to treat life-threatening antibiotic resistance," said Dr. Ceri Davies, Head of the Neuroscience Drug Discovery Unit at Takeda.

Dr. Wangshick Ryu, CEO of the Institut Pasteur Korea said "We are honoured to collaborate with GARDP on a global project of great importance to find a solution for antibiotic resistance. The world needs global cooperative action to prevent the post-antibiotic era. This work, instigated by GARDP, is an active response to this urgent global demand that connects Institut Pasteur Korea's resources with the technology of global pharmaceutical companies. We believe that together we can achieve much more."

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About GARDP

GARDP is a not-for-profit research and development organization that addresses global public health needs by developing new or improved antibiotic treatments, while endeavouring to ensure their sustainable access. Initiated by the World Health Organization (WHO) and the Drugs for Neglected Disease *initiative* (DNDi), GARDP is an important element of WHO's Global Action Plan on Antimicrobial Resistance that calls for new public-private partnerships to encourage research and development of new antimicrobial agents and diagnostics. www.gardp.org.

About Eisai Co., Ltd.

Eisai Co., Ltd. is a leading global research and development-based pharmaceutical company headquartered in Japan. We define our corporate mission as "giving first thought to patients and their families and to increasing the benefits health care provides," which we call our *human health care* (*hhc*) philosophy. With approximately 10,000 employees working across our global network of R&D facilities, manufacturing sites and marketing subsidiaries, we strive to realize our *hhc* philosophy by delivering innovative products to address unmet medical needs, with a particular focus in our strategic areas of Oncology and Neurology. As a global pharmaceutical company, our mission extends to patients around the world through our investment and participation in partnership-based initiatives to improve access to medicines in developing and emerging countries. www.eisai.com.

About Takeda Pharmaceutical Company Limited

Takeda Pharmaceutical Company Limited (TSE: 4502) 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 neuroscience therapeutic areas plus vaccines. Takeda conducts R&D both internally and with partners to stay at the leading edge of innovation. Innovative products, especially in oncology and gastroenterology, as well as Takeda's presence in emerging markets, are currently fueling the growth of Takeda. Approximately 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. www.takeda.com/newsroom.

About Institut Pasteur Korea

Institut Pasteur Korea (IPK) is an international research institute focused on addressing global health issues with a combination of cutting-edge approaches in order to understand disease mechanisms and develop new treatments. By promoting multi-disciplinary projects, IPK is at the forefront of drug discovery and an economic growth engine that contributes to Korea's scientific intellectual and technical resources. IPK is a member of the Institut Pasteur International Network. As a hub institution, IPK plays a key role in the Network, serving as a bridge between Korea and global bio-pharma science, expanding Korea's R&D base collaborative research projects with global alliances.

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2 WHO. (2017). Global priority list of antibiotic-resistant bacteria to guide research, discovery, and development of new antibiotics. World Health Organization. Available at: http://www.who.int/medicines/publications/global-priority-list-antibiotic-resistant-bacteria/en/