



Allergan and Heptares Announce Global R&D and Commercialization Partnership for Novel Treatments in Alzheimer's and Other Neurological Disorders

- **Adds Selective Muscarinic Agonists Discovered and Developed by Heptares to Allergan's Leading CNS Pipeline**
- **Reinforces Allergan's Commitment to Development of Treatments for Alzheimer's Disease and Other Neurological Disorders**
- **Heptares Eligible to Receive Upfront, R&D and Milestone Payments, Plus Royalties**

DUBLIN, IRELAND and LONDON, UK April 7, 2016 Allergan plc (NYSE: AGN) a leading global pharmaceutical company, and Heptares Therapeutics, the wholly-owned subsidiary of Sosei Group Corporation ("Sosei"; TSE Mothers Index: 4565), today announced that Allergan's wholly-owned subsidiary, Allergan Pharmaceuticals International Limited and Heptares have entered into a definitive agreement under which Allergan will license exclusive global rights to a broad portfolio of novel subtype-selective muscarinic receptor agonists in development for the treatment of major neurological disorders, including Alzheimer's disease.

Under the terms of the agreement, Heptares will receive an upfront payment of \$125 million and is eligible to receive contingent milestone payments of up to approximately \$665 million associated with the successful Phase 1, 2 and 3 clinical development and launch of the first three licensed compounds for multiple indications and up to approximately \$2.5 billion associated with achieving certain annual sales thresholds during the several years following launch. In addition, Heptares is eligible to receive up to double-digit tiered royalties on net sales of all products resulting from the partnership. Allergan is also committing up to \$50 million to a research and development program to be conducted jointly by Allergan and Heptares aimed at advancing multiple candidates through Phase 2 clinical studies. Allergan will be responsible for the development of licensed compounds upon initiation of Phase 2b studies and for subsequent manufacturing and commercialization of the products.

The agreement covers first-in-class selective small molecule agonists targeting muscarinic M1 and M4 receptors in the brain, discovered using Heptares' proprietary StaR® technology platform. Allergan will receive exclusive rights to a broad clinical and preclinical portfolio of M1, M4 and dual M1/M4 agonists, including HTL9936 and HTL18318, selective M1 agonists currently in Phase 1 clinical development.

M1 selective compounds are in development for the potential treatment of symptomatic cognitive deficits in Alzheimer's patients, with the potential upside of better tolerability and a more pronounced effect compared with available treatments. M4 selective compounds may provide a novel approach to treat the neurobehavioral symptoms (psychoses) associated with Alzheimer's disease and related neurological disorders, through a different mechanism of action than available antipsychotics. Combined, dual M1/M4 agonists may be able to treat both cognitive impairment and neurobehavioral symptoms.

"Cognitive impairment and psychosis are progressive and debilitating symptoms associated with many CNS diseases, including Alzheimer's disease, with few approved therapies available," said David Nicholson, Executive Vice President and President, Global Brands Research and Development at Allergan. "The Heptares M1 compounds have shown promising results in early development in their ability to selectively target the M1 receptor without also activating the M2 or M3 receptors, which are associated with undesirable side effects. We look forward to advancing these compounds into the next stages of development, and potentially adding new approaches to helping physicians treat patients suffering from the effects of Alzheimer's disease, an area of medicine where Allergan remains committed to continued innovation."

The safety, tolerability and pharmacokinetic profile of HTL9936 were assessed in a recently completed Phase 1 study. The data provide strong evidence of a therapeutic window for the selective M1 agonist mechanism in general, and for progression of HTL9936 and similar molecules as medicines to treat cognitive disorders. HTL9936 exhibited good brain penetration and M1 selectivity with no adverse events typically attributed to the stimulation of M2 and M3 receptors. HTL9936 also exhibited robust and statistically significant changes in brain electrical activity measured using multiple electroencephalography (EEG) biomarkers relevant to cognition. These pro-cognitive effects were seen at low doses and low blood concentrations that were safe and well tolerated.

Malcolm Weir, Chief Executive Officer of Heptares and Chief R&D Officer at Sosei, said: "We are delighted that the quality of our muscarinic agonist candidates, discovered and developed wholly in-house, and our translational capabilities have been recognized by Allergan, a global leader in the development and commercialization of treatments for CNS diseases. We have a highly committed and experienced partner in Allergan and look forward to working together towards the development of multiple new breakthrough medicines over the coming years."

Shinichi Tamura, Chairman and CEO of Sosei Group Corporation, added: "This new agreement with Allergan marks an important milestone in our journey to become a global biopharmaceutical company. This agreement further endorses our strategic decision to acquire Heptares in February last year, placing its GPCR-directed drug discovery and development capabilities at the heart of our business."

This transaction is subject to customary clearances under the Hart-Scott-Rodino Antitrust Improvements Act.

Ends

About Muscarinic Receptors

Muscarinic receptors are G protein-coupled receptors (GPCRs) found in multiple tissues. Until now, attempts to develop medicines that target M1 and M4 receptors have been unsuccessful because of side effects caused by the activation of M2 and M3 receptors. Selective M1 or M4 agonists that do not activate M2 or M3 therefore are highly sought after, and expected to address blockbuster markets.

About Cognitive Impairment in Alzheimer's Disease and other CNS Diseases (1)

Today there is significant unmet medical need and heavy economic burden across multiple diseases characterized by cognitive impairment and dementia. In Alzheimer's disease (AD), currently available drugs provide limited and transient effects on cognition. Healthcare costs associated with AD and dementia (estimated at over \$640 billion for North America, Western Europe and Asia-Pacific) including nursing home care, continue to grow dramatically and new therapies with better and more durable efficacy are urgently needed. It is estimated that over 45 million people worldwide have dementia (4.8 million in North America, 7.5 million in Western Europe, 3.6 million in Asia-Pacific) and this is expected to increase to over 130 million in 2050. Alzheimer's disease is the most common cause of dementia and may contribute to 60–70% of cases. In addition, an estimated 1.4 million patients in the US suffer from Lewy body dementia.

(1) Sources: World Health Organization, Alzheimer's Disease International, National Institute of Mental Health, Lewy Body Dementia Association.

About Allergan

Allergan plc (NYSE: AGN), headquartered in Dublin, Ireland, is a unique, global pharmaceutical company and a leader in a new industry model – Growth Pharma. Allergan is focused on developing, manufacturing and commercializing innovative branded pharmaceuticals, high-quality generic and over-the-counter medicines and biologic products for patients around the world.

Allergan markets a portfolio of best-in-class products that provide valuable treatments for the central nervous system, eye care, medical aesthetics, gastroenterology, women's health, urology, cardiovascular and anti-infective therapeutic categories, and operates the world's third-largest global generics business, providing patients around the globe with increased access to affordable, high-quality medicines. Allergan is an industry leader in research and development, with one of the broadest development pipelines in the pharmaceutical industry and a leading position in the submission of generic product applications globally.

With commercial operations in approximately 100 countries, Allergan is committed to working with physicians, healthcare providers and patients to deliver innovative and meaningful treatments that help people around the world live longer, healthier lives.

For more information, visit Allergan's website at www.allergan.com

About Heptares Therapeutics

Heptares is a clinical-stage company creating transformative medicines targeting G protein-coupled receptors (GPCRs), a superfamily of 375 receptors linked to a wide range of human diseases. Heptares' proprietary StaR® technology and structure-based drug design (SBDD) capabilities enable us to engineer and develop drugs for highly validated, yet historically undruggable or challenging GPCRs. Using this approach, we are building an exciting pipeline of new medicines (small molecules and biologics) with the potential to transform the treatment of Alzheimer's disease, schizophrenia, cancer immuno-oncology, migraine, addiction, metabolic disease and other indications. We have partnerships for our novel

candidates and technologies with leading pharmaceutical and biotechnology companies, including Allergan, AstraZeneca, MedImmune, MorphoSys, Pfizer and Teva. Heptares is a wholly owned subsidiary of Sosei Group Corporation. For more information, please visit www.heptares.com and www.osei.com

HEPTARES is a registered trademark in the EU, Switzerland, US and Japan;
StaR® is a registered trademark in the EU and Japan.

About Sosei

Sosei is a biopharmaceutical company originating from Japan but with global presence. Sosei's primary business model is based on identifying novel and/or differentiated product assets or technology platforms and, through supporting these in preclinical and clinical development and establishing commercial partnerships, advancing new medicines to patients worldwide. For more information about Sosei, please visit www.osei.com/en

Allergan Forward-Looking Statements

Statements contained in this press release that refer to future events or other non-historical facts are forward-looking statements that reflect Allergan's current perspective of existing trends and information as of the date of this release. Except as expressly required by law, Allergan disclaims any intent or obligation to update these forward-looking statements. Actual results may differ materially from Allergan's current expectations depending upon a number of factors affecting Allergan's business. These factors include, among others, the difficulty of predicting the timing or outcome of FDA approvals or actions, if any; the impact of competitive products and pricing; market acceptance of and continued demand for Allergan's products; difficulties or delays in manufacturing; and other risks and uncertainties detailed in Allergan's periodic public filings with the Securities and Exchange Commission, including but not limited to Allergan's Annual Report on Form 10-K for the year ended December 31, 2015 (certain of such periodic public filings having been filed under the "Actavis plc" name). Except as expressly required by law, Allergan disclaims any intent or obligation to update these forward-looking statements.