Novartis licenses three novel anti-infective programs to Boston Pharmaceuticals

- Clinical and pre-clinical stage programs focused on addressing growing need for new treatments against drug resistant Gram-negative bacteria
- Agreement is part of Novartis strategy to partner with like-minded innovators to further develop new medicines to address global health challenges
- Research and development for new medicines to treat tropical diseases continues through the Novartis Institute for Tropical Diseases

Basel, Switzerland, October 3, 2018 – Novartis announced today that it has entered into a licensing and equity agreement with Boston Pharmaceuticals for the development of three novel anti-infective drug candidates that are part of the Novartis Infectious Diseases portfolio, which have the potential to address the need for new agents to treat antibiotic resistant Gram-negative infections.

Antibiotic resistance is widely recognized as a major public health threat and innovative candidates to combat drug resistant bacteria remain a critical unmet need. Both the Centers for Disease Control and Prevention (CDC), and the World Health Organization (WHO) have identified CRE and drug resistant Pseudomonads as serious threats that pose significant risk to human health.

“The need for new antibiotics that address drug resistant bacteria is clear and we are pleased to find a partner in Boston Pharmaceuticals who will dedicate the appropriate expertise and resources for the further development and commercialization of these programs,” said Jay Bradner, M.D., President of the Novartis Institutes for BioMedical Research. “Drug discovery and development is a team sport and this agreement is part of our strategy to partner with like-minded innovators outside of our walls to further develop new innovative medicines focused on addressing global health challenges.”

Under the terms of the agreement, Boston Pharmaceuticals acquired worldwide rights to two complementary candidates targeting carbapenem-resistant enterobacteriaceae (CRE) and one candidate targeting Pseudomonas infections. Novartis will receive an upfront payment and is entitled to royalties and milestone payments for successfully commercialized medicines. In addition, Novartis will receive an equity stake in two new companies formed together with Boston Pharmaceuticals to further develop and commercialize these programs. Financial terms of the agreement were not disclosed.

The programs included in this agreement include:

- LYS228 is a potential best-in-class monobactam which has entered clinical development and which has demonstrated activity against CRE with resistance caused by serine beta-lactamases (SBLs) and/or metallo beta-lactamases (MBLs);
- IID572 is a novel beta-lactamase inhibitor that may be used in combination with LYS228 or other beta-lactam antibiotics to expand their use against difficult-to-treat infections caused by a broader spectrum of CRE; and
- MAK181 is an oral, first-in-class LpxC inhibitor for Pseudomonas infections.

“The acquisition of these three novel anti-infective candidates further demonstrates our commitment to addressing unmet medical needs in order to benefit patients,” said Robert Armstrong, Ph.D., C.E.O. of Boston Pharmaceuticals. “Novartis has done a tremendous job advancing new solutions to infections caused by drug resistant Gram-negative pathogens and developing these innovative candidates with best-in-class or first-in-class potential. We look forward to building on this quality research as we advance these candidates.”

Novartis continues to discover and develop new medicines to treat tropical diseases through research at the Novartis Institute for Tropical Diseases (NITD). In addition, earlier this year the company announced a five-year $100 million commitment to advance the Novartis malaria pipeline through 2023 and to complete a comprehensive global clinical trial program for two novel antimalarial drug candidates KAF156 and KAE609.

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we consistently rank among the world’s top companies investing in research and
development. Novartis products reach nearly 1 billion people globally and we are finding
innovative ways to expand access to our latest treatments. About 125,000 people of more
than 140 nationalities work at Novartis around the world. Find out more at www.novartis.com.

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