

## FORGE ENTERS INTO COLLABORATION WITH ROCHE TO DEVELOP NOVEL ANTIBIOTIC TO TREAT LUNG INFECTIONS

-Forge is eligible to receive \$190.5M in total payments-

**SAN DIEGO, California, March 25, 2020** – Forge Therapeutics, Inc. (Forge) announced today that they have entered into a research collaboration and option agreement with Hoffmann-La Roche Ltd. (Roche) to license FG-LpxC LUNG, a novel antibiotic for the treatment of serious lung infections attributed to antibiotic-resistant Gram-negative bacteria including *Pseudomonas aeruginosa*. The FG-LpxC LUNG program is being developed to treat hospital-based infections, including those cited on the CDC's most urgent threats list, which commonly occur in people with weakened immune systems and chronic lung diseases.

Under the terms of the agreement, Roche has an exclusive option to license the FG-LpxC LUNG program from Forge. Forge will retain control of the program prior to Roche exercising its option, at which time Roche will take over the further development. Forge is eligible to receive up to \$190.5M in total payments, including potential sales-based payments and royalties upon commercialization of the program.

"Antibiotic-resistance remains an increasing threat to global human health and we are extremely pleased to partner with Roche to accelerate our FG-LpxC LUNG program toward the clinic," said Zachary A. Zimmerman, Ph.D., CEO of Forge. "We look forward to combining our novel approach and innovative chemistry with Roche's proven drug development and commercialization expertise to provide a truly new class of antibiotic for people suffering from serious antibiotic-resistant infections."

James Sabry, Head of Roche Pharma Partnering commented, "We are excited to work together with Forge to develop truly innovative antibiotics. This new collaboration demonstrates our strong commitment to combat the urgent global health threat of drug-resistant bacterial infections with novel life-saving treatments that have the potential to make a difference in patients' lives."

For over 30 years, biopharma has been unsuccessful in developing LpxC inhibitors, with the majority of programs suffering from a lack of suitable chemistry. While most LpxC efforts utilize hydroxamic acid as the compound's metal binding pharmacophore (MBP), the Forge platform is built on a proprietary library of hundreds of non-hydroxamate MBPs to serve as selective starting points for inhibitor development. Utilizing an innovative process that combines fragment- & structure-based drug discovery, the FG-LpxC LUNG program has rationally designed potent and efficacious non-hydroxamate inhibitors of LpxC. Built on a completely novel and differentiated chemical scaffold, FG-LpxC LUNG is being optimized for the treatment of serious lung infections. Forge was awarded nondilutive funding in January 2019 from CARB-X, a global non-profit partnership dedicated to funding and supporting antibacterial research, to support development of its FG-LpxC LUNG program.

## About Antibiotic Resistance and Need for Innovative Antibiotics

Antibiotics are lifesaving drugs that underpin almost every aspect of modern medicine. As bacteria become more and more resistant to conventional antibiotics, common medical procedures such as surgery, chemotherapy, and dialysis become increasingly risky. Since antibiotic resistance indiscriminately affects people of all ages and nationalities, the biotechnology industry, leading government agencies, and world leaders all agree that there is an urgent need for innovative, novel classes of antibiotics.

According to the 2019 CDC Antibiotic Resistant Threats Report, more than 2.8 million antibiotic-resistant infections occur in the U.S. each year, leading to more than 35,000 deaths. Over 700,000 people worldwide die from antibiotic-resistant infections and estimates indicate that the annual toll could rise to 10 million people by 2050. Beyond the human toll, antibiotic resistance is estimated to cost the U.S. approximately \$20 billion in excess medical costs each year.

## About LpxC and Forge's Innovative Chemistry

LpxC, a zinc metalloenzyme, is an attractive and highly sought-after antibiotic target – it is conserved across Gram-negative bacteria and not found in Gram-positive bacteria or human cells. Inhibiting LpxC results in potent killing of Gram-negative bacteria with the benefit of sparing Gram-positive bacteria such as those residing in the protective microbiome of the gut which help to deter opportunistic *C. difficile* infections.

Other LpxC inhibitors have been evaluated by biopharma in the past but chemistry limitations (e.g. hydroxamic acid) have yielded ineffective compounds that suffer from poor drug-like properties. Thus, there are no approved therapeutics targeting LpxC. Forge, using its proprietary chemistry platform, has developed novel non-hydroxamate inhibitors of LpxC that are safe and effective in animal models of Gram-negative infection and are able to kill Gram-negative 'superbugs' where other antibiotics are ineffective.

## **About Forge Therapeutics**

At Forge Therapeutics, we are developing novel antibiotics targeting bacterial metaldependent enzymes. Forge has a strategic antibiotic discovery relationship with Evotec AG, antibiotic research collaborations with Basilea Pharmaceutica International Ltd. and Hoffmann-La Roche Ltd., and has been awarded funding by CARB-X as well as government agencies. For further information, please visit the company's website <u>www.ForgeTherapeutics.com</u> and follow us on Twitter <u>@ForgeThera</u>. **Forge Company Contact:** 

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