Eligo Presents Preclinical Data Demonstrating for the First Time that Gut Microbiome Modulation via Delivery of CRISPR Nuclease Impacts Disease Progression

Paris, France, June 15, 2021 – Eligo Bioscience SA, a Paris, France-based microbiome engineering company, today announced that the Company presented preclinical data on its lead drug candidate, EB003, for the treatment of severe diarrhea induced by shiga-toxin (Stx) producing *E. coli* (STEC, leading to Hemolytic Uremic Syndrome), at the 14th Annual CRISPR 2021 meeting held June 1-10, 2021. The data presented further supports development of CRISPR-Cas antimicrobial strategies against STEC and other microbiome bacterial targets utilizing Eligo's proprietary Eligobiotics® platform. Eligo's proprietary technology is protected by over 20 patent families, including the 2013 foundational IP on CRISPR antimicrobials. EB003 has been granted Orphan Drug Designation by the EMA.

"The data presented virtually this year at the CRISPR meeting continues to support the potential of our lead candidate EB003 and the use of the Eligobiotics® platform to modulate bacterial populations of the microbiome with unprecedented precision," said Xavier Duportet, Ph.D., Chief Executive Officer of Eligo Bioscience. "EB003 demonstrated efficacy across multiple in vitro and in vivo models. Moreover, we observed significantly reduced STEC colonization and alleviated symptoms in 100% of treated animals in a disease model representative of the intended patient population. We are very excited about these findings, how they support progression of EB003, and the clear demonstration of effective application of our proprietary platform."

Dr. Duportet continued, "This is indeed the first time that symptom alleviation has been achieved via the delivery of exogenous nuclease in a gut infection model, building on the foundational invention of this technology. Even more exciting is the fact that bacterial killing is solely achieved by the nuclease activity as opposed to the lytic cycle of the phage, therefore enabling a true modulation at the strain level based on the sole presence of a deleterious gene in bacteria. We are looking forward to advancing EB003 into the clinic next year."

The virtual presentation describes efficacy data in *in vitro* collections of epidemiologically relevant STEC strains, and in two animal models. Efficiency was first demonstrated *in vitro* on

a collection of epidemiology relevant STEC strains where EB003 was able to efficiently kill *E. coli* strains harboring Stx genes. The EB003 CRISPR-based killing mechanism also abolished Shiga-toxin production, compared to antibiotic treatment, which can on the contrary lead to Shiga-toxin overproduction. Additionally, EB003 was able to reduce STEC colonization by multiple orders of magnitude in both a mouse gut colonization model and an infant rabbit disease model. In the latter model that recapitulates STEC infection associated symptoms, treatment with EB003 demonstrated statistically significant symptom alleviation.

The results provide strong support for further development of the company's CRISPR-Cas antimicrobial strategy and Eligobiotics® platform. Eligo is planning to initiate its first clinical trial for EB003 for the treatment of STEC in the second quarter of 2022.

About EB003

EB003, Eligo's lead drug candidate, was developed using the Company's proprietary **S**equence-**S**pecific **A**nti-**M**icrobials (SSAM) platform. SSAM relies on the delivery of a non-replicative DNA payload encoding an exogenous Cas nuclease, guided towards specific genomic sequences. This modality leads to targeted lethal DNA double strand-breaks only if such sequences are present in the bacterial genome. This strategy enables precise engineering of the microbiome by killing only the strains harboring genomic sequences targeted by the nuclease. EB003 is being developed for the treatment of severe diarrhea induced by shiga-toxin (Stx) producing *E. coli* (STEC, leading to Hemolytic Uremic Syndrome) and is expected to enter Phase 1 in the second quarter of 2022. EB003 has been granted Orphan Drug Designation by the EMA.

About Eligobiotics®

Eligobiotics® is a first in class microbiome gene therapy that can change the microbiome composition and function with unprecedented precision. Eligobiotics® can be designed, built, and optimized to target the microbiome species of choice with the automated proprietary platform that leverages Eligo's unique expertise in synthetic biology, phage biology, genetic engineering, and bioinformatics. Eligobiotics® can be used to precisely and selectively remove unwanted bacterial strains carrying deleterious genes while leaving beneficial bacterial strains intact through the targeted delivery of a payload encoding an RNA-guided CRISPR-Cas nuclease. Alternatively, Eligobiotics® can deliver to target bacteria the necessary genetic instructions to produce, display or secrete therapeutic proteins of interest in close proximity to the host's cells. Eligo is utilizing its Eligobiotics® platform to build a pipeline of drug candidates in inflammation, autoimmunity, and oncology.

About Eligo Bioscience

Eligo Bioscience is the world leader in microbiome gene therapy to address microbiome-associated diseases. Eligo was founded by scientists from The Rockefeller University, where CRISPR-based antimicrobials were invented, and by scientists from MIT. Eligo was named a Technology Pioneer by the World Economic Forum in 2017. With venture capital funding from Khosla Ventures and Seventure Partners, and non-dilutive funding from the European Commission, CARB-X, and Bpifrance, Eligo is rapidly advancing its lead program into clinical development, with the first clinical trials on track to begin in 2021.

Through its novel technology platform and robust intellectual property positions, Eligo is poised to be a catalyst for the growth anticipated across the microbiome-associated diseases industry.

For more information about Eligo visit https://www.eligo.bio/.

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