



Press Release

JDRF and Gubra join forces to develop a new glucose responsive insulin for diabetes

New York and Hørsholm, Denmark, 18 June 2018—JDRF and Gubra today announced a partnership to develop a glucose-responsive insulin (GRI) as a treatment for people with insulin-requiring diabetes, such as type 1 diabetes (T1D). The Gubra approach is based on a novel, and unique concept that differs fundamentally from other glucose sensing insulin approaches and the JDRF funding commitment will help accelerate the program to its next development stage.

A GRI is a form of insulin designed to work when blood glucose levels rise above healthy levels and to be inactive when blood glucose levels are in or below the standard value. Therefore, GRI can respond to meal-induced excursions in blood glucose more rapidly and naturally than conventional fast-acting insulins, ultimately leading to improved glucose control and longer-term outcomes. GRI will not lead to insulin-mediated hypoglycaemia, which is one of the most feared and severe side effects of insulin treatment experienced by people with T1D.

Gubra's unique approach to GRI combines properties of a mealtime bolus insulin with those of a long-acting basal insulin into a one-molecule solution providing not only improved overall blood glucose control, but also a safer and simpler drug for people with T1D. The Gubra GRI is a circulating locked insulin depot that can be activated rapidly by changes in glucose concentration, differing markedly from other GRI approaches currently being pursued. The initial one-year partnership project aims to further mature Gubra's proven concept towards clinical and pharmaceutical development.

JDRF Scientist Jonathan Rosen, PhD says, "JDRF is excited to partner with Gubra on developing a novel glucose responsive insulin, which has the potential to disrupt insulin based treatments and reduce late stage T1D complications."

Keld Fosgerau, PhD, Gubra CSO, says, "Based on an unprecedented and highly innovative chemical approach we are developing a safe and yet very efficacious single solution insulin product, that has the potential to revolutionize the treatment of T1D. We are extremely pleased to collaborate with JDRF and to thereby get the recognition of a promising project from a highly respected patient organization, and with the substantial funding we will be able to accelerate our development efforts."

About JDRF

JDRF is the leading global organization funding type 1 diabetes (T1D) research. Our mission is to accelerate life-changing breakthroughs to cure, prevent and treat T1D and its complications. To accomplish this, JDRF has invested more than \$2.2 billion in research funding since our inception. We are an organization built on a grassroots model of people connecting in their local communities, collaborating regionally for efficiency and broader fundraising impact, and



uniting on a national stage to pool resources, passion, and energy. We collaborate with academic institutions, policymakers, and corporate and industry partners to develop and deliver a pipeline of innovative therapies to people living with T1D. Our staff and volunteers throughout the United States and our six international affiliates are dedicated to advocacy, community engagement and our vision of a world without T1D. For more information, please visit jdrf.org or follow us on Twitter: @JDRF

About Gubra

Founded in 2008, Gubra is a privately-held biotech company with two primary areas of business: Pre-clinical contract research services (CRO) and proprietary early target and drug discovery programs. Gubra's main focus is the metabolic space (diabetes, obesity, NASH and gastrointestinal diseases), where Gubra specializes in in vivo pharmacology, peptide chemistry, molecular pharmacology, histology, imaging, stereology, NGS (next generation sequencing), bioinformatics and ex vivo assays. Gubra is an abbreviation of GUT and BRAin, the original key focus areas of research and expertise. For more information, please visit our website at www.gubra.dk.