ProLynx announces PLX039, a hydrogel-microsphere drug delivery system that supports once-monthly administration of a GLP-1 receptor agonist

SAN FRANCISCO, June 12, 2017 (GLOBE NEWSWIRE) -- In a late-breaking abstract at the 77th American Diabetes Association meeting in San Diego**,** ProLynx LLC announced a novel drug delivery system to support once-monthly subcutaneous (SC) administration of a GLP-1 receptor agonist (GLP-1RA) called PLX039 for the treatment of Type 2 diabetes (T2D). The work will be published in ACS Chemical Biology.

GLP-1RAs have emerged as an important standard-of-care drug class for the treatment of Type 2 diabetes and are projected to command a $12 Bill market by 2024. These agonists auto-regulate blood glucose concentration, have anti-obesity effects, and may reduce risks for adverse cardiovascular events in patients with T2D. Currently, there are three once- or twice-daily and three once-weekly GLP-1RAs approved by the FDA; an additional once-weekly agonist and a long-acting osmotic pump delivery system are in late stage trials. Yet, poor medication adherence and persistence remain as major factors leading to failure of glycemic control in almost 50% of T2D patients. Now, ProLynx has used its half-life extension platform to develop a monthly-administered GLP-1RA. Compared to weekly-administered agonists, obvious benefits are believed to include greater patient convenience, compliance and persistence.

Daniel Santi, co-founder and President of ProLynx, said: “This is the first GLP-1RA that does not require huge doses of a drug meant for weekly administration to maintain therapeutic levels over a monthly period.” Santi added: “PLX039 should find a dose-interval sweet-spot with its once-monthly administration. Some patients will find that a once-weekly dosing interval is too short, and will not want to have a long-acting osmotic pump implanted; for these patients, the once monthly GLP-1 receptor agonist PLX039 should be just right.”

In the ProLynx half-life extension platform, a drug is tethered to hydrogel microspheres by a self-cleaving linker that is pre-programmed to release the drug at a pre-determined rate. After SC injection, the drug is slowly released from the microsphere depot into the systemic circulation. ProLynx attached their peptidic GLP-1RA – a stabilized analog of exenatide – to its hydrogel microspheres. After SC injection to rodents the GLP-1RA showed a serum half-life of one month. Monthly injections of the formulation in diabetic rats showed identical glucoregulatory effects as continuously infused exenatide, and simulation of the pharmacokinetics indicate it should serve well as a once-a-month treatment for T2D in humans.

About ProLynx. ProLynx LLC is a privately held biotechnology company developing proprietary drug delivery systems for half-life extension of proteins, peptides and small molecules. The company is seeking to apply its technology to extend half-lives of drug candidates of pharmaceutical companies, and to improve properties of off-patent therapeutics. ProLynx has a monthly GLP-1 receptor agonist and a subcutaneous long-acting octreotide in its pre-clinical portfolio, and a PEG~SN-38 in Phase 1 clinical trials. The company is located in San Francisco, CA. Further information about the company may be found at www.ProLynxllc.com.

Contact:
Eric Schneider: Eric@ProLynxllc.com
Or BD@ProLynxllc.com
415-552-5306