

Artificial Pancreas Liraglutide Study

HIC# 1211011156

This study is designed to look at how well young adults' blood sugars can be controlled with a "closed loop artificial pancreas" using a continuous glucose sensor, an insulin pump, and a computer program that automatically determines how much insulin to give based on the glucose level. We will also study the effect of liraglutide, a medication used to treat diabetes, on the ability of the closed loop system to control the blood sugar levels.

Liraglutide ("Victoza") is a long-acting synthetic form of Glucagon-like peptide 1 (GLP-1). It is approved for use in type 2 diabetes and its use is associated with improved blood sugars and weight loss. GLP-1 is an incretin hormone that is secreted from the L cells in the intestine. GLP-1 helps control blood sugars after meals by lowering the level of the hormone glucagon in the body (glucagon raises the blood sugar); by slowing down the absorption of carbohydrates; and by causing you to eat less.

To participate, you/your child must meet the following criteria:

- Be between 18 and 40 years old
- Have type 1 diabetes for at least 1 year
- Treated with an insulin pump for at least 3 months
- HbA1c less than 9.0%

For information, contact Lori at 203-737-3595 or lori.carria@yale.edu