



Canadian Clinical
Trial Network
Accelerating Diabetes Breakthroughs

Pilot Study of a Semi-Structured Computerized Overnight Basal Rate Assessment Protocol to Reduce Nocturnal Hypoglycemia

Objective:

To test the feasibility and short-term efficacy of a semi-automated, computerized overnight basal rate assessment tool that uses readings from a continuous glucose monitor (CGM) to guide assessment and reprogramming of overnight basal rates in insulin pumps.

Study Design:

A three-week single-arm pilot study of 20 subjects with type 1 diabetes (T1D), all of whom will have a three day baseline assessment and a two week intervention using a computerized overnight basal rate assessment tool that uses readings from a CGM, followed by a three day outcome assessment. This study is for patients of any gender and ethnicity, aged 18 and above, who must be on insulin pump therapy of any duration.

Reason for Study:

This pilot study is testing a Canadian-designed computer algorithm that seeks to optimize the basal (resting) insulin dose rate delivered by insulin pumps. Establishing more precise dosing for basal rates will help reduce the incidence of hypoglycemia (severe low blood sugar) among people with T1D. If successful, this tool will have immediate impact for individuals who wear an insulin pump.

Study Contact:

This study is no longer recruiting participants. We thank everyone who has taken part.

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