

## **Angie02 Summary**

A new study published in the New England Journal of Medicine led by Dr Roman Hovorka (University of Cambridge Metabolic Research Laboratories) shows that an 'artificial pancreas' (closed-loop insulin delivery) improves blood glucose control without increasing the risk of hypoglycaemia in people with type 2 diabetes in hospital.

The trial carried out at two hospitals in the UK and Switzerland, involved 136 people who needed insulin to manage blood glucose levels during their admission. They were randomly assigned to receive their insulin therapy via the artificial pancreas or via standard insulin injections for up to 15 days (or until discharge from hospital). People using the artificial pancreas spent an average of 24.2% more time with blood glucose levels in the target range (5.6 to 10.0mmol/l), compared to those receiving insulin injections. They also had lower average blood glucose levels (8.5 vs 10.5mmol/l). This was achieved without increasing their daily insulin dose and without an increased risk of hypoglycaemia.

This study could transform the care people with type 2 diabetes receive in hospital. The team are now using the artificial pancreas for people who receive artificial nutrition in hospital, where blood glucose levels can be particularly challenging to control.