

## IMPROVED GLUCOSE MONITORING DURING EXERCISE USING WEARABLE DEVICES

A research group from CIBER, Clinic Hospital, IDIBAPS, Universitat Politècnica de València and University of Girona has developed a method to restore the standard accuracy of the continuous glucose monitor, allowing better mitigation of hypoglycemia during exercise in people with type 1 diabetes.

### The Need

It has been shown that Continuous Glucose monitoring (CGM) decreases its accuracy during periods of exercise and may put the patient's health at risk in a period of great relevance, since periods of exercise are prone to hypoglycemia, which can cause severe complications.

### The Solution

Through the use of biometric signals provided by physical activity monitoring devices (wearables) a system that is capable of reversing the CGM estimation error during exercise has been designed. This system is also able to restore the accuracy of glucose measurements to a similar magnitude to that taking place outside periods of activity.

### Innovative Aspects

- Greater accuracy in glucose estimates than other market devices during exercise.
- Possibility of integration into different monitoring systems: artificial pancreas, automatic pump suspension systems and CGM-based decision support systems for glycemetic control.
- Improving the quality of life of people with diabetes by reducing the risks of hypoglycemia during physical exercise.



Regular exercise can deregulate glucose homeostasis – CCO public domain.

### Stage of Development:

Laboratory Prototype

### Intellectual Property:

- Priority US patent application filed (August 5, 2020)

### Aims

Looking for a partner interested in a license and/or a collaboration agreement to develop and exploit this asset.

### Contact details

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