

# A trial to assess the safety and efficacy of intermittent putamenal GDNF infusions administered via Convection Enhanced Delivery (CED) in Parkinson's

<https://neurodegenerationresearch.eu/survey/a-trial-to-assess-the-safety-and-efficacy-of-intermittent-putamenal-gdnf-infusions-administered-via-convection-enhanced-delivery-ced-in-parkinsons/>

## **Principal Investigators**

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## **Institution**

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## **Contact information of lead PI**

### **Country**

United Kingdom

## **Title of project or programme**

A trial to assess the safety and efficacy of intermittent putamenal GDNF infusions administered via Convection Enhanced Delivery (CED) in Parkinson's

## **Source of funding information**

Parkinson's UK

## **Total sum awarded (Euro)**

€ 2,772,172

## **Start date of award**

29/10/2012

## **Total duration of award in years**

4.0

## **The project/programme is most relevant to:**

Parkinson's disease & PD-related disorders

## **Keywords**

Research Abstract

Do intermittent infusions of glial cell line-derived neurotrophic factor (GDNF) promote neurorestoration in Parkinson's.

Aim: To evaluate in Parkinson's the efficacy and safety of intermittent GDNF intra-putaminal infusions administered by an improved Convection Enhanced Delivery approach permitting delivery to the entire posterior putamen.

Objectives: To assess the effects of intermittent GDNF infusions upon: off state motor symptoms; motor complications, cognition, mood, quality of life and 18F-dopa PET imaging. To determine the volume of distribution of GDNF post CED using MRI. To demonstrate the safety of GDNF infusions in

Parkinson's, including GDNF antibody response.

Design: A single centre, randomized, double blind, placebo-controlled trial, in idiopathic Parkinson's, of intermittent bilateral posterior putamen GDNF infusions administered via CED.

Methodology: 36 PD patients of moderate severity will be randomized in a 1:1 allocation to receive fortnightly infusions of GDNF or placebo for 9 months. Over the following 6 months (extension-phase) all patients will receive GDNF infusions every four weeks. Blinding will be maintained until the extensionphase ends. Primary and secondary clinical outcome measures will be performed at 8-week intervals. 18F-dopa PET imaging will be acquired at baseline, 9 and 15 months. Volume of distribution of infusate will be determined by serial MRI imaging. Safety and tolerability data will be recorded. The primary outcome measure is: Percentage change from baseline in the practically defined off state motor UPDRS score (part III) after 9 months of treatment.

Implications: Results from this trial will inform a rapid follow-on phase III multi-centre international trial.

## **Lay Summary**

**Further information available at:**

### **Types:**

Investments > €500k

### **Member States:**

United Kingdom

### **Diseases:**

Parkinson's disease & PD-related disorders

### **Years:**

2016

### **Database Categories:**

N/A

### **Database Tags:**

N/A