Research Roundup

This month we are delighted to share details of a groundbreaking new trial in Finland plus new research results.

Research news

Parkinson's UK invests in first trial of pioneering treatment in people with Parkinson's

We're providing £1.55m through our Virtual Biotech programme to carry out the first clinical trials to see if HER-096 is safe for people with Parkinson's and to start exploring its potential benefits.

What is HER-096?

HER-096 is a new drug that aims to protect and restore the dopamine-producing brain cells that are lost in Parkinson's.

It has been developed based on a growth factor that is naturally produced by the brain called CDNF (Cerebral Dopamine Neurotrophic Factor).

Research in the lab shows CDNF can help damaged dopamine cells to survive and recover.

However, CDNF is a large protein that cannot easily cross from the blood into the brain, so giving it to patients would require complex and invasive surgery.

For this reason, Herantis Pharma has developed HER-096, a smaller drug with similar properties that can be given by a simple injection under the skin making it a less invasive approach.

What will happen in this new trial?

HER-096 has already been tested in a study with 60 healthy participants and was shown to be safe with no serious side effects.

The investment from the Parkinson's Virtual Biotech and MJFF will enable a new study to test if regular injections of HER-096 are safe in people with Parkinson's.

1 November 2024

The trial is being carried out in Finland. 24 people with Parkinson's will be given HER-096 or placebo twice a week for 4 weeks and monitored for any unwanted side effects.

Data from this study will be used to identify the best dosage to move forward into larger clinical studies.

Analysis of blood samples and fluid collected by lumbar puncture will be used to look for evidence of whether the treatment is having a positive effect on cells inside the brain.

Harnessing the power of growth factors

Arthur Roach, Virtual Biotech Director at Parkinson's UK, said:

"We're delighted to partner with The Michael J. Fox Foundation to fund Herantis Pharma's first trial of HER-096, an innovative new approach to treating Parkinson's.

"We've previously invested heavily in the development of treatments of growth factors for Parkinson's, most notably the pioneering trial of GDNF in Bristol, because we believe these proteins hold huge hope for protecting and even rescuing the cells that are lost during the course of Parkinson's.

"The big challenge with growth factors is delivering them safely and effectively to the brain, so what's really innovative about this new approach is that the team have created a molecule that may bring the benefits of a growth factor without the need for complex surgery.

"We hope this study will show that HER-096 is safe and that it has the potential to be a life-changing therapy for people with Parkinson's in the future."

Take Part in Research

The development of new Parkinson's treatments is only possible if everyone is part of the research process. We need your help to push promising research forward.

What might cause problems in managing impulse control for people with Parkinson's?

The research

Researchers at the University of Birmingham are investigating what factors in the brains of people with Parkinson's might lead to a higher risk of losing impulse control. This could include having difficulties controlling eating, or being tempted to overspend, and can be a result of taking some dopamine replacement therapies.

This research aims to contribute to developing a tool to predict, as well as new ways to prevent, impulse control issues in Parkinson's.

Who do the researchers need?

• 20 people with Parkinson's who are not taking Parkinson's medication

What is involved?

- Attending 2 study visits to the University of Birmingham
- Each visit will last around 3 hours
- They will involve completing a simple task while your brain activity is recorded by non-invasive brain stimulation techniques or by small painless sensors attached to your scalp
- Participants will be given around £60 for taking part (£10/hour). Travel and accommodation costs will also be reimbursed
- For more information, Please contact Aliya Warden by email at ach722@bham.ac.uk or phone on 07557 028 358.

Interested in taking part?

Please contact Aliya Warden by email at **ach722@bham.ac.uk** or phone on **07557 028 358**.

The deadline for taking part in this research is **28 February 2025**.

Research results: thanks to you

In March 2022 we shared a study which aimed to better understand depression and changes in motivation in people with Parkinson's. The researchers explored effort-based decision making, where our willingness to make an effort to complete a task depends on the potential reward. 125 people took part in the study, including 62 people with Parkinson's. They took part in a task which involved being offered monetary rewards for achieving different levels of physical effort when squeezing a grip force.

The results of the study showed that people with both Parkinson's and depression showed lower motivation. They were also less likely to accept offers of reward compared to those with only one of the conditions, or neither. Additionally, dopamine medication improved motivation in people with Parkinson's without depression, but not in people with both conditions.

These findings suggest that people with depression and Parkinson's are less sensitive to rewards. The results may explain why many people experience a lack of interest in pleasurable activities. This highlights a need for future treatments that focus on increasing motivation in people who experience depression with their Parkinson's.