Clinical trial of an investigational compound that is being developed for the treatment of neurological disorders (such as Parkinson's disease)

Clinical trial code-CHOBEM65-0D10JU

Type of study

Soon a clinical trial will start at ICON with an investigational compound that may potentially be used for the treatment of neurodegenerative diseases. Neurodegenerative diseases are diseases where brain cells (neurons) stop working or die. Examples of this type of diseases are Alzheimer's disease, Parkinson's disease, Huntington's disease, and ALS (Amyotrophic Lateral Sclerosis). There is currently no cure and the disease gets worse over time. Inflammation in the brain could be a contributing factor. The study compound is a compound that can reduce inflammation in the brain and could benefit people with neurodegenerative diseases.

In this trial, we investigate how safe the investigational compound is and how well it is tolerated when it is administered to healthy participants.

Furthermore, we investigate how quickly and to what extent the compound is absorbed, transported, and eliminated from the body.

Additionally, for most participants in Group 4, 5 or 6, cerebrospinal fluid (CSF) samples will be collected via lumbar puncture twice: once before administration of the study compound and once afterwards. We will measure the amount of study compound and other compounds in the CSF. CSF is the liquid surrounding the brain and the spinal cord. It is produced continuously and in large quantities, which makes it safe to take small amounts of CSF. To collect CSF from the spinal cord, a very fine needle is inserted between two vertebrae in your lower back. The doctor will check whether it is safe to carry out this procedure through a blood test before this procedure is done. A few participants will undergo a sham procedure. A sham procedure is when the doctor pretends to collect CSF. In the sham procedure, the needle will not be pierced deep enough to collect CSF. You will not experience any difference between an actual puncture and the sham procedure.

We compare the effects of the compound with the effects of a placebo. A placebo is a compound without any active ingredient. Whether you receive the study compound or placebo will be determined by chance. Whether you undergo lumbar puncture, or a sham procedure will be assigned without your awareness.

The compound has not been used by humans before. It has been extensively tested in the laboratory and on animals.

This trial is not intended to improve your health but is necessary for the further development of this compound. The trial will only take place after it has been approved by the Independent Ethics Committee (METC).

Setup and duration of the trial

This trial will be executed in healthy male and female participants. You can participate only once in this trial.

To check if you are eligible to participate a medical screening will take place before the start of the trial. Depending on availability, this can be performed in Groningen or Utrecht. This screening will take place within 4 weeks before the start of the clinical trial.

For group 1, 2 or 3 the trial consists of 1 period during which you will stay in the research facility in Groningen (location van Swietenlaan 6) for 3 days (2 nights) followed by 10 short visits. The follow-up visit will take place during your last short visit.

For group 4, 5 or 6 the trial consists of 2 periods during which you will stay in the research facility in Groningen (location van Swietenlaan 6). The first period is a stay of 4 days (3 nights) followed by one short visit. Following this short visit, you will have a short stay of 2 days (1 night) and 8 short visits. The follow-up visit will take place during your last short visit.

You will receive the compound or placebo once in total. You will be given the compound or placebo as intravenous infusion (solution of the compound that will be administered directly in a blood vessel).

During the trial, blood will regularly be drawn and urine will be collected. Prior to screening, (each) admission, and the follow-up, you have to stay fasted for 4 hours. You can only drink water prior to your visit. This means that we will ask you to fast prior to any participation in the trial. You have not yet signed the form for participation in the trial. After the screening it will be announced whether you can participate.

On the days you will receive the compound you will receive standardized meals (a standard composition). This is less standardized on the other days.

Consumption of medication, alcohol, and tobacco / nicotine containing products are not allowed during the trial. Also, before the start of the trial and when you are not staying in the research facility, there will be restrictions for these products. Use of decaffeinated coffee and (herbal) teas without caffeine (also called theine) is allowed.

Risks and medical supervision

All potential medicines can cause side effects.

As the compound will be administered to humans for the first time in this trial, side effects in humans are not known yet. The compound has been studied extensively in the laboratory and in animals. Based on the way this study compound works, the following side effects could occur:

- Infections of the skin that may require medical intervention such as the use of an antibiotic or antifungal.
- Infection of the central nervous system, such as:
    - Meningitis is an infection associated with inflammation of the fluid and membranes that cover the brain and spinal cord.
    - Encephalitis, an inflammatory reaction in the brain that could be triggered by infection from a virus or bacteria.
- Temporary change to your mood, memory and learning ability.
- Allergic reaction.

You should take into account that (serious) side effects may occur that are still unknown. In addition to unknown side effects, there is a (small) chance that an allergic reaction will occur. This can be caused by the study compound or other ingredients that are used to prepare the formulation. During the study, you will be under strict medical supervision. The doctors and investigators of ICON are always well-informed about the compound being studied. With this knowledge they can estimate the effects and side effects reasonably well.

As part of group 4, 5 or 6, you will undergo a lumbar puncture (LP). The procedure will be carried out by trained medical personnel using a technique that minimizes risks and you will be monitored closely. Before the CSF collection, you will undergo tests to check if it is safe to carry out the CSF collection (for example blood test and neurological examination).

The lumbar puncture procedure could cause pain, nausea (feeling sick), headache, discomfort, bruising, stiffness, bleeding, and, rarely, an infection. Occasionally, during needle insertion, a spinal nerve might be touched, causing pain to spread to the buttock or leg. This usually lasts only a short time. Rarely, participants may experience bleeding

into the spinal canal, or spinal canal nerve damage. Headache after lumbar puncture can be accompanied by dizziness, nausea and ringing in the ears (tinnitus). If you develop a headache, you will be encouraged to lie down in a comfortable position. In most cases headache can be alleviated with bed rest, drinking enough water, and simple analgesics if needed. Most headaches last for several hours to two days; in extremely rare cases, headaches persisting for a full week have been reported. If the headache does not go away, a second procedure called a blood patch may be necessary to treat it. This involves taking a sample of your blood and injecting it in your back.

Conditions for participation

- You are a healthy male or female.
- You are at least 18 and no more than 55 years old.
- Your Body Mass Index (BMI) is between 18.0 and 32.0 kg/m2.
- Both non-smokers and light smokers (maximum of 5 cigarettes per day) are allowed to participate in this clinical trial. During your stay in our research facility you are not allowed to smoke.

- **Note:**

  - You cannot participate in the trial if you have participated in another clinical trial in the 30 days prior to the first compound administration in this clinical trial (counting from the follow-up visit of the previous study). For some study compounds this can be 90 days. This will be discussed during your telephone screening.
  - To determine if you are suitable to participate in this trial, you will undergo a medical screening. Depending on availability, this can be performed in Groningen or in Utrecht.

  - As a **female** you can only participate if you meet one of the following conditions:
    - You have passed the menopause (no periods for at least 12 months);
    - You have been sterilized.
  - As a **male** you can only participate if you meet one of the following conditions:
    - You are using a condom in combination with an additional contraception method used by your female partner;
    - You have been sterilized or your female partner is sterilized or has passed the menopause (no periods for at least 12 months);
    - You are not sexually active according to your lifestyle;
    - You are only sexually active with a partner of the same sex.

Compensation

You will receive a gross compensation of € 3377 for participation in group 1, 2 or 3. For participation in group 4, 5 or 6 of the trial, you will receive a gross compensation of € 4880. Travel expenses will be reimbursed based on the distance traveled (€ 0.21 net per kilometer) with a minimum of € 13 and a maximum of € 176.40 (840 kilometers) per round trip, regardless of the mode of transportation.

Do you want to know more?

Please call ICON on business days between 8:30 AM and 8:00 PM or on Saturday between 10:00 AM and 4:00 PM on the following numbers:
Netherlands: 0800-0292044
Belgium: 0800-89036
Germany: 0800-0713579/ 0031-50-8505798

Or send an e-mail to info@geneesmiddelenonderzoek.nl. When calling or sending an e-mail, please quote the indicated trial code (Clinical trial code-CHOBEM65-0D1OJU). Alternatively, you can visit www.iconclinicaltrials.com.