

Alzheimer's Disease (AD)

A study to state how safe RO7126209 is at different doses and how the body processes RO7126209

Brainshuttle AD: A Multiple Ascending Dose Study to Investigate the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of RO7126209 Following Intravenous Infusion in Participants With Prodromal or Mild to Moderate Alzheimer's Disease

Trial Status
Active, not recruiting

Trial Runs In
9 Countries

Trial Identifier
NCT04639050 2020-002477-98
2023-509678-52-00 BP42155

The information is taken directly from public registry websites such as ClinicalTrials.gov, EuClinicalTrials.eu, ISRCTN.com, etc., and has not been edited.

Official Title:

A phase Ib/IIa, randomized, double-blind, placebo-controlled, multiple-ascending dose, parallel-group study to investigate the safety, tolerability, pharmacokinetics, and pharmacodynamics of RO7126209 following intravenous infusion in patients with prodromal or mild to moderate Alzheimer's disease.

Trial Summary:

The purpose of this study is to evaluate the safety, tolerability, immunogenicity, pharmacokinetics, and pharmacodynamics of multiple-ascending intravenous (IV) doses of RO7126209 in participants with prodromal or mild to moderate Alzheimer's disease (AD), who are amyloid positive based on amyloid positron emission tomography (PET) scan.

Hoffmann-La Roche
Sponsor

Phase 1/Phase 2
Phase

NCT04639050 2020-002477-98 2023-509678-52-00 BP42155
Trial Identifiers

Eligibility Criteria:

Gender
All

Age
#50 Years & # 85 Years

Healthy Volunteers
No

1. Why is the BP42155 clinical trial needed?

As people get older, the chances of having Alzheimer's disease go up. In fact, about 5% to 8% of people aged 60 and above have this condition. This disease is caused by a buildup of something called beta-amyloid plaques in the brain. Scientists are testing treatments that can help stop or reduce the buildup of beta-amyloid as a potential treatment for Alzheimer's disease.

2. How does the BP42155 clinical trial work?

This clinical trial is recruiting people with a health condition called Alzheimer's Disease. People can take part if they are between 50 and 85 years of age (inclusive) who have been diagnosed with prodromal Alzheimer's Disease, or mild to moderate Alzheimer's Disease and fulfill all of the given inclusion criteria. The study will have four parts:

- Part 1 will test different doses of RO7126209 OR placebo for 28 weeks in a placebo-controlled study. Placebo-controlled studies are when people are put in groups that get given either a medicine or a placebo.
- Part 2 will further characterize doses previously tested in part 1, and may use a different dosing regimen or combination of doses (but the number of doses and the frequency of dosing will not be higher than what has been tested in part 1), participants will get RO7126209 OR placebo.
- Part 3 will be an open-label study (all participants will receive RO7126209) to see how different dosing schedules affect the treatment's outcomes.
- Part 4 will be an open-label study (all participants will receive RO7126209) offered to all participants who completed Part 1, 2 or 3, to assess the long-term safety, tolerability, and other effects of RO7126209 over a period of 101 weeks.

The clinical trial doctor will see participants regularly. These hospital visits will include checks to see how the participant responds to the treatment and any unwanted effects they may have. Total time of participation in the clinical trial will be 68 weeks for Parts 1 and 2, 64 weeks for Part 3 and 129 weeks if participating in Part 4. Participants can stop trial treatment and leave the clinical trial at any time.

3. What are the main endpoints of the BP42155 clinical trial?

The main clinical trial endpoints (the main results measured in the trial) are the changes in the amount of substance, called amyloid, in the brain before and after treatment. The unwanted effects of the drug, like how often they happened, how severe they were, and when they occurred, are also measured. Other important things measured in the study include how much of the drug was in the blood and brain fluid, and if the body made any special antibodies against the drug. These measurements are taken at different times during the study. Overall, the measurements are to see if the drug is safe and effective, and if it had any impact on the brain and body.

4. Who can take part in this clinical trial?

People can take part in this trial if they have been diagnosed with prodromal or mild to moderate Alzheimer's Disease and aged between 50 and 85 years old. People may not be able to take part in this trial if they have any evidence of a condition other than Alzheimer's Disease that may affect cognition. Some other things that might prevent someone from participating in this study are if they have serious problems in their brain, if they have had certain mental health conditions like schizophrenia or depression, if they have had cancer in the past or are currently being treated for it, if they have had certain blood or eye diseases, if they have heart problems like atrial fibrillation or high blood pressure that is not controlled or if they have had renal disease.

5. What treatment will participants be given in this clinical trial?

Part 1 and Part 2 of this clinical trial are a 'placebo-controlled' clinical trial, which means that one of the groups will be given a substance with no active ingredients (also known as a 'placebo'); it looks like the drug being tested but does not contain any real medicine. Comparing results from the different groups helps the researchers know whether any changes seen result from the drug or occur by chance.

Part 1 and Part 2 are also a double-blinded trial, which means that neither the participant nor the clinical trial doctor can choose or know the group the participant is in, until the trial is over. This approach helps to prevent bias and expectations about what will happen. However, the participant's clinical trial doctor can find out which group the participant is in, if their safety is at risk. This approach helps to prevent bias and expectations about what will happen.

Everyone who joins this clinical trial will now be entering Part 2 where dose levels of RO7126209 previously tested in Part 1 will be characterized further. They will be split into groups randomly and given either RO7126209 or non-active medicine (placebo). The first dose will be administered slowly over a period of 4 hours. If this is assessed to be safe, the next doses will be delivered over a period of 2 hours.

These groups may be further divided, where a different dose, dosing frequency and/or number of doses might be tested, but will never exceed what has been tested in the previous part 1.

Part 3 of this trial is unblinded and the patients will be split into two groups in a 1:2 ratio. The different groups will overall receive the same cumulative dose of RO7126209 but with different dosing frequencies. This is to determine the best dosing frequency of RO7126209.

Part 4 of this clinical trial is open-label, which means everyone involved, including the participant and the clinical trial doctor, will know the clinical trial treatment the participant has been given.

6. Are there any risks or benefits in taking part in this clinical trial?

The safety or effectiveness of the experimental treatment or use may not be fully known at the time of the trial. Most trials involve some risks to the participant. However, it may not be greater than the risks related to routine medical care or the natural progression of the health condition. People who would like to participate will be told about any risks and benefits of taking part in the clinical trial, as well as any additional procedures, tests, or assessments they will be asked to undergo. All of these will be described in an informed consent document (a document that provides people with the information they need to decide to volunteer for the clinical trial).

Risks associated with the clinical trial RO7126209

Participants may have side effects (an unwanted effect of a drug or medical treatment) from the RO7126209 used in this clinical trial. Side effects can be mild to severe, even life-threatening, and vary from person to person. Participants will be closely monitored during the clinical trial; safety assessments will be performed regularly.

Participants will be told about the known and possible unwanted effects of RO7126209 based on human and laboratory studies or knowledge of similar drugs. RO7126209 and placebo will be given with intravenous infusion (via a tube linked to a small needle in the participant's vein). Participants will be told about any known unwanted effects of intravenous infusion.

Potential benefits associated with the clinical trial

Participants' health may or may not improve from participation in the clinical trial. Still, the information collected may help other people with similar medical conditions in the future.

Inclusion Criteria:

Key inclusion criteria for part 1, 2 and 3:

- Ability to provide written consent signed by the participant
- Availability of a person (referred to as the "study partner") who: consents to participate throughout the duration of study, in the Investigator's judgment, has frequent and sufficient contact with the participant, is fluent in the language of the tests used at the study site
- Willingness and ability to complete all aspects of the study (including magnetic resonance imaging [MRI], lumbar puncture, clinical genotyping, and positron emission tomography [PET] imaging)
- Capable of completing assessments either alone or with the help of the study partner
- Adequate visual and auditory acuity, in the Investigator's judgment, sufficient to perform the neuropsychological testing (eye glasses and hearing aids are permitted)
- Probable mild to moderate AD dementia (consistent with National Institute on Aging-Alzheimer's Association [NIA-AA] core clinical criteria for probable AD dementia) or prodromal AD (consistent with the NIA-AA diagnostic criteria and guidelines for mild cognitive impairment due to AD)

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- Screening Mini-Mental State Examination (MMSE) score of 18 to 28 points, inclusive, within 84 days before baseline
- Clinical Dementia Rating-Global Score (CDR-GS) of 0.5, 1, or 2 within 84 days before baseline
- Positive amyloid PET scan (cut-off: >50 Centiloid units) within 12 months before baseline
- In case of treatment with symptomatic AD medications, dosing regimen must be stable for at least 8 weeks prior to baseline and until randomization
- Agreement not to donate blood or blood products for transfusion for the duration of the study and for 1 year after final dose of study drug
- Agreement not to participate in other research studies for the duration of this study
- Agree to apolipoprotein E (APOE) genotyping

Inclusion criteria for Part 4:

- Completed the treatment period in Part 1, Part 2, or Part 3 of the study

Exclusion Criteria:

Key exclusion criteria for part 1, 2 and 3:

- Any evidence of other relevant neurological condition, including other (non-AD) neurodegenerative and neuropsychiatric conditions, neurovascular brain disorders, seizure disorders, inflammatory and infectious disorders of the central nervous system, trauma and delirium, among several others
- Other relevant medical conditions including significant hematological diseases, any clinically significant ophthalmologic diseases, decreased visual acuity in either eye, with a BCVA letter score of less than 20 letters on the Early Treatment Diabetic Retinopathy Study (ETDRS) chart or the Snellen equivalent of 20/400 if the ETDRS chart is not used
- Clinically significant cardiovascular diseases, chronic kidney disease, confirmed and unexplained impaired hepatic function, abnormal thyroid function, among several others
- History of hypersensitivity to biologic agents or any of the excipients in the formulation
- Clinically significant abnormalities (as judged by the Investigator) in laboratory test results (including complete blood count, chemistry panel, routine cerebrospinal fluid [CSF] parameters and urinalysis)
- MRI exclusion criteria: >2 lacunar infarcts, any territorial infarct >1 cm³, any white matter lesion that corresponds to an overall Fazekas score of 3 that requires at least one confluent hyperintense lesion on the fluid-attenuated inversion recovery (FLAIR) sequence, which is #20 mm in any dimension
- More than 4 microhemorrhages on MRI and/or presence of any focal area of leptomeningeal hemosiderosis based on the review performed by the central MRI reader prior to randomization
- Presence of any other significant cerebral abnormalities, including amyloid-related imaging abnormality-edema/effusion (ARIA-E), as assessed on MRI
- Inability to tolerate MRI procedures or contraindication to MRI
- Inability to undergo ophthalmological assessments
- Contraindication to lumbar puncture
- Contraindication to having a PET scan

Exclusion criteria for Part 4:

- Prematurely discontinued from the treatment period for study (i.e., before the start of the follow-up period of Part 1, Part 2, or Part 3) for any reason or meeting discontinuation criteria before the baseline visit of Part 4.
- Received any active investigational treatment other than RO7126209 during or since completion of Part 1, Part 2 or Part 3
- Any passive immunotherapy (immunoglobulin) since completion of Part 1, Part 2, or Part 3 that is meant to prevent or postpone cognitive decline.

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- Use of anti-coagulation medications - Evidence of ongoing ARIA-E. In this case participant may enroll into Part 4 once the ARIA-E is resolved - Evidence of ongoing infusion-related reaction (IRR) or hypersensitivity reaction. In this case participant may enroll into Part 4 once the IRR is resolved.
- MRI evidence of any of the following at OLE baseline: evidence of ongoing ARIA-E, any ARIA-H (leptomeningeal hemosiderosis or microhemorrhages) that would require permanent discontinuation of study treatment, > 2 lacunar infarcts, Any territorial infarct > 1 cm³, any white matter lesion that corresponds to an overall Fazekas score of 3 that requires at least one confluent hyperintense lesion on the FLAIR sequence, which is # 20 mm in any dimension
- Any drop in hemoglobin of > 20% compared to predose on Day 1 or hemoglobin value below 10 g/dL