

A study to assess the safety and tolerability of ACI-3024 and how the drug affects and interacts with the body

Submission date 01/03/2021	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
Registration date 30/03/2021	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
Last Edited 01/04/2021	Condition category Nervous System Diseases	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Alzheimer's disease is the most common cause of dementia. Dementia includes symptoms of memory loss and difficulties with thinking speed, understanding, judgement, or language. People with Alzheimer's disease may also experience changes in mood and difficulties doing daily activities.

ACI-3024 is an investigational drug developed against Alzheimer's disease. There are currently no effective treatments for this condition. It is hoped that the study drug will be more effective than the treatments currently available and have a positive impact for patients with Alzheimer's disease.

This study is the first time the study drug is being given to humans. The study aims to collect information the safety of the study drug and any side effects that may be associated with it; how much of the study drug and its breakdown products get into the bloodstream, urine, and the fluid of the brain and spinal cord; how food, sex, age, and ethnicity affect how the body breaks down and removes the study drug from the body; and how the study drug affects biomarkers of Alzheimer's disease in blood (a biomarker is something found in the blood, other body fluids, or body tissues that can be used to measure the progress of a disease or the effects of a treatment).

Who can participate?

Healthy volunteers aged between 20 and 80 years.

What does the study involve?

Up to 80 participants will be taking part in this study, which consists of 2 main parts. In part one, several cohorts of healthy volunteers will receive increasing doses of ACI-3024 on one single occasion. In part two, several cohorts of healthy volunteers will receive increasing doses of ACI-3024 for several days.

What are the possible benefits and risks of participating?
No benefits are expected from participation in the study.

The study drug may have side effects that are currently unknown. There is a remote chance that the study drug (and indeed any drug product) may cause an allergic reaction, which in some cases may be adverse. This is known as an anaphylactic reaction. Symptoms of an anaphylactic reaction include sudden shortness of breath, decreased consciousness, and rash. An anaphylactic reaction may require emergency treatment. In order to monitor participants' health during the study, regular checks of blood pressure, body temperature, and heart (by ECG) will be performed. Blood samples will be regularly taken to check the liver, kidney and other organs are functioning normally.

Where is the study run from?
Covance Clinical Research Unit Ltd (UK)

When is the study starting and how long is it expected to run for?
From February 2019 to August 2020

Who is funding the study?
AC Immune (Switzerland)

Who is the main contact?
clinicaltrials@acimmune.com

Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

2019-001567-73

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

ACI-3024-1901

Study information

Scientific Title

A first-in-human, randomized, placebo-controlled, double-blind, sequential single and multiple ascending dose (SAD/MAD) study with open-label food effect and pharmacodynamic assessment arms to assess the safety, tolerability, pharmacokinetics, and pharmacodynamics of ACI-3024

Acronym

ACI-3024-1901

Study objectives

To assess the safety, tolerability, pharmacokinetics, and pharmacodynamics of ACI-3024

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 31/05/2019, London - Brent Research Ethics Committee (80 London Road, Skipton House, London, SE1 6LH; +44 (0)20 7104 8222; nrescommittee.london-brent@nhs.net), ref: 19/LO/0617

Study design

Double-blind randomized placebo-controlled sequential single dose and multiple ascending dose (SAD/MAD) study

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Treatment

Participant information sheet

No participant information sheet available

Health condition(s) or problem(s) studied

Alzheimer Disease

Interventions

Participants will be randomly allocated to one of the 4 arms of the study:

1. Single ascending doses oral intake with ACI-3024
2. Single dose oral intake with placebo
3. Multiple ascending doses oral intake with ACI-3024
4. Multiple doses oral intake with placebo

The study is made of 2 subsequent parts.

In part 1, the single ascending dose part, 5 cohorts of 8 subjects will participate. In each cohort, subjects will be randomly assigned to the active (ACI-3024, 6 subjects) or placebo arm (2 subjects). Doses of ACI-3024 will be increasing doses. Participants will swallow a suspension of ACI-3024 or placebo (liquid used for suspension) once during their participation.

In part 2, the multiple ascending dose part, 4 cohorts of 10 subjects will participate. In each cohort, subjects will be randomly assigned to the active (ACI-3024, 8 subjects) or placebo arm (2 subjects). Doses of ACI-3024 will be using doses already tested in part 1. Participants will swallow a suspension of ACI-3024 or placebo (liquid used for suspension) once or twice a day during 14 days

Intervention Type

Drug

Phase

Phase I

Drug/device/biological/vaccine name(s)

ACI-3024

Primary outcome measure

Safety/tolerability measured using Adverse events (AEs), physical and neurological examinations, vital signs measurements, 12 lead electrocardiogram parameters, incidence of laboratory abnormalities, and MRI in multiple ascending dose cohorts over 37 days (SAD part) or 70 Days (MAD part)

Secondary outcome measures

Pharmacokinetics (PK) measured using levels of ACI-3024 in plasma, urine, and cerebrospinal fluid (CSF) by liquid chromatography over 7 days (SAD part) or 28 Days (MAD part)

Overall study start date

04/02/2019

Completion date

24/08/2020

Eligibility

Key inclusion criteria

1. Aged 20 to 59 years inclusive (non-elderly participants), or 60 to 80 years inclusive (elderly participants)

Non-Japanese participants:

1. Body mass index between 18.0 and 30.0 kg/m²
2. Body weight between 50 and 100 kg (males) or between 45 and 80 kg (females)

Japanese participants:

1. First-generation Japanese subjects (biological parents and all biological grandparents are of exclusively Japanese descent and were born in Japan)
2. Body mass index between 17.0 and 30.0 kg/m²
3. Body weight between 45 and 100 kg (males) or between 40 and 80 kg (females)

Participant type(s)

Healthy volunteer

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

80

Total final enrolment

80

Key exclusion criteria

1. History of, or current: liver or renal insufficiency; clinically significant cardiac, vascular, pulmonary, gastrointestinal, endocrine, neurologic, rheumatologic, psychiatric or metabolic disturbances; any inflammatory illness; or any other illness that the investigator considers

should exclude the subject and which may interfere with the study assessments

2. History of significant hypersensitivity, intolerance, or allergy to any drug compound, food, or other substance, unless approved by the investigator

MAD cohorts only:

1. Lifetime history of suicide attempt (including an active attempt, interrupted attempt, or aborted attempt), or has suicidal ideation in the past 6 months according to the Columbia Suicide Severity Rating Scale (C-SSRS) at screening
2. Screening brain MRI scan that shows evidence of significant abnormality that would suggest a clinically significant finding that may impact the subject's ability to safely participate in the study, in the opinion of the investigator
3. History of alcoholism or drug/chemical abuse within 2 years prior to screening.
4. Positive alcohol breath test result or positive urine drug screen (confirmed by repeat) at screening or check in
5. History of human immunodeficiency virus (HIV) antibody positive or tests positive for HIV at screening
6. History of hepatitis B surface antigen (HBsAg) or hepatitis C antibody (anti-hepatitis C virus) positive, or positive hepatitis panel at screening
7. Positive pregnancy test result at screening or check in
8. Clinically significant impaired hepatic function at screening or check in , defined as either of the following (confirmed by repeat):
 - 8.1. Serum ALT or AST $>1.25 \times$ upper limit of normal
 - 8.2. Total bilirubin $>1.5 \times$ upper limit of normal
9. Serum albumin or total plasma protein outside of the clinical reference range for the testing laboratory at screening or check in
10. Creatinine clearance <60 ml/min as assessed by the Cockcroft-Gault equation

Participants undergoing MRI (MAD part):

1. Have any contraindications for MRI studies, including claustrophobia, or the presence of metal (ferromagnetic) implants, or a cardiac pacemaker

Date of first enrolment

20/06/2019

Date of final enrolment

04/03/2020

Locations

Countries of recruitment

England

United Kingdom

Study participating centre

Covance Clinical Research Unit Ltd

Springfield House

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Leeds

United Kingdom
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Sponsor information

Organisation

AC Immune (Switzerland)

Sponsor details

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Sponsor type

Industry

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ROR

<https://ror.org/00e8cky09>

Funder(s)

Funder type

Industry

Funder Name

AC Immune

Results and Publications

Publication and dissemination plan

This is a phase 1 study in healthy volunteers with no publication intended.

Intention to publish date

01/01/1900

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available as the study is an early phase study and results are not planned to be disseminated.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			26/07/2023	No	No