Trial record **1 of 1** for: genetic vaccine for amyloidosis

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A Study to Assess the Effects of ACI-24.060 in Alzheimer's Disease and in Down Syndrome (ABATE Study)

ClinicalTrials.gov Identifier: NCT05462106

Recruitment Status : Recruiting
First Posted : July 18, 2022
Last Update Posted : January 19, 2023

See **Contacts and Locations**

View this study on Beta.ClinicalTrials.gov

Sponsor:
AC Immune SA

Collaborator:
Worldwide Clinical Trials

Information provided by (Responsible Party):
AC Immune SA

Study Details | Tabular View | No Results Posted | Disclaimer | How to Read a Study Record

Study Description

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Brief Summary:

The purpose of this study is to assess the safety, tolerability, immunogenicity and pharmacodynamic effects of ACI-24.060 in subjects with prodromal Alzheimer's disease and in non-demented adults with Down syndrome.

Condition or disease	Intervention/treatment	Phase
Alzheimer's Disease Prodromal Alzheimer's Disease **Amyloid** Plaque Beta-**Amyloid** Alzheimer's Disease in Down Syndrome	Biological: Placebo Biological: ACI-24.060 at Dose A Biological: ACI-24.060 at Dose B Biological: ACI-24.060 at Dose C Biological: ACI-24.060 at Dose D Biological: ACI-24.060 at Dose X Biological: ACI-24.060 at Dose Y	Phase 1 Phase 2

Detailed Description:

This phase 1b/2 study will be in 2 parts. Study Part 1 will involve subjects with prodromal Alzheimer's disease. Study Part 2 will involve subjects with Down syndrome.

Study Design

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Study Type : Interventional (Clinical Trial)
Estimated Enrollment : 140 participants

Allocation:	Randomized
Intervention Model:	Sequential Assignment
Masking:	Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)
Primary Purpose:	Treatment
Official Title:	A Phase 1b/2, Multicenter, Adaptive, Double-blind, Randomized, Placebo-controlled Study to Assess the Safety, Tolerability, Immunogenicity, and Pharmacodynamic Effects of ACI-24.060 in Subjects With Prodromal Alzheimer's Disease and in Adults With Down Syndrome
Actual Study Start Date :	June 21, 2022
Estimated Primary Completion Date :	June 2026
Estimated Study Completion Date :	June 2026

Resource links provided by the National Library of Medicine NIH NLM

MedlinePlus Genetics related topics: Down syndrome Alzheimer disease

MedlinePlus related topics: Alzheimer's Disease Down Syndrome

Genetic and Rare Diseases Information Center resources:
Familial Alzheimer Disease

U.S. FDA Resources

Arms and Interventions

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Arm	Intervention/treatment
Placebo Comparator: Placebo for Study Part 1 (Prodromal AD) Prodromal AD participants receive placebo at predefined time points over 48 weeks	Biological: Placebo Administration of Placebo
Experimental: ACI-24.060 at Dose A Prodromal AD participants receive dose A of ACI-24.060 at predefined time points over 48 weeks	Biological: ACI-24.060 at Dose A Administration of Dose A of ACI-24.060
Experimental: ACI-24.060 at Dose B (Optional)	Biological: ACI-24.060 at Dose B

Arm	Intervention/treatment
Prodromal AD participants receive dose B of ACI-24.060 at predefined time points over 48 weeks. This arm is optional.	Administration of Dose B of ACI-24.060
Experimental: ACI-24.060 at Dose C (Optional) Prodromal AD participants receive dose C of ACI-24.060 at predefined time points over 48 weeks. This arm is optional.	Biological: ACI-24.060 at Dose C Administration of Dose C of ACI-24.060
Experimental: ACI-24.060 at Dose D (Optional) Prodromal AD participants receive dose D of ACI-24.060 at predefined time points over 48 weeks. This arm is optional.	Biological: ACI-24.060 at Dose D Administration of Dose D of ACI-24.060
Placebo Comparator: Placebo for Study Part 2 (Down syndrome) Participants with Down syndrome receive placebo at predefined time points over 74 weeks	Biological: Placebo Administration of Placebo
Experimental: ACI-24.060 at Dose X Participants with Down syndrome receive dose X of ACI-24.060 at predefined time points over 74 weeks. Dose X will be a dose already tested in Study Part 1.	Biological: ACI-24.060 at Dose X Administration of Dose X of ACI-24.060. Dose X will be a dose already tested in Study Part 1
Experimental: ACI-24.060 at Dose Y (Optional) Participants with Down syndrome may optionally receive a dose Y of ACI-24.060 at predefined time points over 74 weeks.	Biological: ACI-24.060 at Dose Y Administration of Dose Y of ACI-24.060

Outcome Measures

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Primary Outcome Measures :

1. Number of participants with Adverse Events (AEs) assessed by intensity (mild, moderate or severe) and causal relationship (unrelated, unlikely, possibly or probably related)
   [Time Frame: From Screening to Week 74 (Study Part 1)]
2. Number of participants with Adverse Events (AEs) assessed by intensity (mild, moderate or

severe) and causal relationship (unrelated, unlikely, possibly or probably related)
[Time Frame: From Screening to Week 100 (Study Part 2)]

3. Number of participants with abnormal MRI results [Time Frame: From Baseline to Week 74 (Study Part 1)]
4. Number of participants with abnormal MRI results [Time Frame: From Baseline to Week 100 (Study Part 2)]
5. Number of participants with abnormal physical and neurological examination results
[Time Frame: From Baseline to Week 74 (Study Part 1)]
6. Number of participants with abnormal physical and neurological examination results
[Time Frame: From Baseline to Week 100 (Study Part 2)]
7. Number of participants reporting suicidal ideation or behavior using Columbia-Suicide Severity Rating Scale (C-SSRS) [Time Frame: From Baseline to Week 74 (Study Part 1)]
8. Number of participants reporting suicidal ideation or behavior using Columbia-Suicide Severity Rating Scale (C-SSRS) [Time Frame: From Baseline to Week 100 (Study Part 2)]
9. Change from baseline in Anti-Abeta antibody titers in blood [Time Frame: From Baseline to Week 100 (Study Part 2)]

Secondary Outcome Measures :

1. Change from baseline in Anti-Abeta antibody titers [Time Frame: From Baseline to Week 74 (Study Part 1)]
2. Change from baseline on brain amyloid levels [Time Frame: From Baseline to W100 (Study Part 2)]

   Brain amyloid load measured via PET imaging. An increase indicates a worsening.

Other Outcome Measures:

1. Change from baseline on brain amyloid levels [Time Frame: From Baseline to W48 (Study Part 1)]

   Brain amyloid load measured via PET imaging. An increase indicates a worsening.

2. Change from baseline on tau levels [Time Frame: From Baseline to W48 (Study Part 1) and to W100 (Study Part 2)]

   Brain tau load measured via PET imaging. An increase indicates a worsening.

3. Change from baseline in cognitive tests - Repeatable Battery for the Assessment of

Neuropsychological Status (RBANS) [Time Frame: From Baseline to Week 74 (Study Part 1)]

The total scale index score ranges from 40 to 160. A higher score indicates a better outcome.

4. Change from baseline in cognitive tests - Alzheimer's Disease Assessment Scale-Cognitive Subscale 13 item (ADAS-Cog 13) [Time Frame: From Baseline to Week 74 (Study Part 1)]

   The score ranges from 0 to 85. A higher score indicates a worse outcome.

5. Change from baseline in clinical function tests - Clinical Dementia Rating Scale (CDR) [Time Frame: From Baseline to Week 74 (Study Part 1)]

   The score ranges from 0 to 18. A higher score indicates a worse outcome.

6. Change from baseline in cognitive tests - Modified Cued Recall Test (mCRT) [Time Frame: From Baseline to Week 100 (Study Part 2)]

   The modified CRT assesses verbal learning and episodic memory. The score ranges from X to Y. A higher score indicates a better outcome.

7. Change from baseline in cognitive tests - Cambridge Cognitive Examination for Individuals with Down Syndrome (CAMCOG-DS2) [Time Frame: From Baseline to Week 100 (Study Part 2)]

   CAMCOG-DS measures cognitive decline. The total score ranges from 0 to 107. A higher score indicates a better outcome.

8. Change from baseline in cognitive tests - Cambridge Neuropsychological Test Automated Battery-Paired Associates Learning (CANTAB-PAL) [Time Frame: From Baseline to Week 100 (Study Part 2)]

   The CANTAB-PAL assesses visual memory and new learning. A higher score indicates a better outcome.

Eligibility Criteria

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Choosing to participate in a study is an important personal decision. Talk with your doctor and family members or friends about deciding to join a study. To learn more about this study, you or your doctor may contact the study research staff using the contacts provided below. For general information, Learn About Clinical Studies.

Ages Eligible for Study:	35 Years to 75 Years (Adult, Older Adult)
Sexes Eligible for Study:	All
Accepts Healthy Volunteers:	No

Criteria

Inclusion Criteria:

Study Part 1

1. Age ≥50 and ≤75 years at screening.
2. Diagnosis of prodromal AD: MCI due to AD according to National Institute on Aging Alzheimer's Association (NIA-AA) criteria.
3. PET scan at screening consistent with the presence of amyloid pathology.
4. Clinical Dementia Rating (CDR)-Global Score of 0.5.
5. Subjects either not taking any marketed treatment for AD or receiving a stable dose of an acetylcholinesterase inhibitor (AChEI) and/or memantine for at least 2 months prior to baseline.

Study Part 2

1. Age ≥35 and ≤50 years at screening (subjects with DS with age ≥35 and ≤39 years may be considered on the condition that there is prior evidence of amyloid results compatible with AD pathology at PET-scan and/or in biofluids).
2. Male or female subjects with DS with a cytogenetic diagnosis being either trisomy 21 or complete unbalanced translocation of the chromosome 21.
3. PET scan at screening consistent with the presence of amyloid pathology.
4. Mild to moderate intellectual disability as per Diagnostic and Statistical Manual of Mental Disorders (DSM-5) classification.
5. Subjects must have a study partner who has direct and regular contact, at least 10 hours per week, with the subject and who is able to provide reliable answers to questions related to the subject, according to the study investigator.

Exclusion Criteria:

1. Any unstable and/or clinically significant medical condition likely to hamper the evaluation of

safety and/or efficacy of the study vaccine (eg, moderate and/or severe untreated obstructive sleep apnea, clinically significant reduction in serum B12 or folate levels, clinically significant abnormalities of thyroid function, stroke, or other cerebrovascular conditions), as per investigator's judgement.

2. DSM-5 criteria for drug or alcohol abuse or dependence currently met within the past 5 years.
3. History or presence of uncontrolled seizures. If history of seizures, they must be well controlled with no occurrence of seizures in the 2 years before study screening. The use of antiepileptic medications is permitted.
4. Concomitant or past history psychiatric or neurologic disorder other than those considered to be related to AD (eg, head injury with loss of consciousness, symptomatic stroke, Parkinson's disease, severe carotid occlusive disease, transient ischemic attacks [TIAs], hemorrhagic and/or non-hemorrhagic stroke).
5. History of meningitis or meningoencephalitis.
6. History of moderate or severe traumatic brain injury.
7. History of inflammatory neurological disorders.
8. History or presence of immunological or inflammatory conditions, including neurological disorders, judged to be clinically significant by the investigator.
9. History of severe allergic reaction (eg, anaphylaxis) including, but not limited to severe allergic reaction to previous vaccines, foods, and/or medications.
10. Significant risk of suicide, defined using the C-SSRS as the subject answering "yes" to suicidal ideation questions 4 or 5 or answering "yes" to suicidal behavior within the past 12 months.
11. MRI scan at screening showing a single area of cerebral vasogenic edema, superficial siderosis, or evidence of a previous macro-hemorrhage or showing more than 4 cerebral microhemorrhages (regardless of their anatomical location or diagnostic characterization as "possible" or "definite"). Evidence of space occupying lesions other than benign meningioma of less than 1 cm diameter, more than 2 lacunar infarcts, or 1 single infarct larger than 1 cm in diameter. Screening MRI scan showing structural evidence of alternative pathology not consistent with AD and is considered to be at the origin of subject's symptoms.
12. Deviations from normal values for hematologic parameters, liver function tests, and other biochemical measures, judged to be clinically significant by the investigator.
13. Subjects with a positive Human Immunodeficiency Virus (HIV-1 and 2) test at screening.
14. Subjects with clinical or laboratory evidence of active hepatitis B or C at screening (eg, HBV or HCV antigens).
15. Subjects with positive syphilis serology consistent with active syphilis at screening.
16. MRI examination cannot be done for any reason, including but not limited to metal implants

contraindicated for MRI and/or severe claustrophobia.

17. Any contraindication for PET scan imaging.
18. Any contraindication to lumbar puncture in subjects undergoing this procedure (note: lumbar puncture is optional in subjects with DS).
19. Previous treatment with ACI-24 or any other active immunotherapy against AD at any time in the past unless there is firm evidence that the subject received placebo only and the placebo formulation is not expected to induce any specific immune response.
20. Previous treatment with any investigational and/or marketed passive immunotherapy against AD within 6 months before screening or 5 half-lives, whichever is longer, unless there is firm evidence that the subject received placebo only.
21. Ongoing treatment with any approved anti-amyloid passive immunotherapy for Alzheimer's disease.
22. Use of acetylcholinesterase inhibitor or glutamatergic drugs (eg, memantine, topiramate, lamotrigine) if not on stable dose for at least 2 months before screening.
23. Any vaccine received within the 2 weeks before screening, including an anti-influenza or anti-COVID 19 vaccine received within 4 weeks before randomization.
24. Subjects with treated hypothyroidism not on a stable dose of replacement medication for at least 2 months before screening and having clinically significant abnormal serum T4 and/or thyroid stimulating hormone at screening.
25. Subjects undergoing lumbar puncture and being treated with any anticoagulants or antiplatelet drugs, except aspirin at doses of 100 mg daily or lower.
26. Use of antidepressants (other than selective serotonin reuptake inhibitors/serotonin-norepinephrine reuptake inhibitors at stable dose); typical antipsychotics; γ-aminobutyric acid agonists (eg, gabapentin); or stimulants (eg, methylphenidate, modafinil). Stable doses of atypical antipsychotics or benzodiazepines are only allowed if this is not considered to influence the safety and the efficacy of the study vaccine according to the site investigator and the sponsor medical monitor.
27. Chronic use of opioid analgesics. A limited treatment duration for acute conditions until 24 hours before cognitive assessment is allowed.
28. Current use of immunosuppressant or immunomodulating drugs or their use within the 6 months before study screening. Current use of oral steroids or their use within the 3 months before study screening.

    Additional Exclusion Criteria in Study Part 2

    The following are exclusion criteria at the time of randomization but will not be considered as exclusionary after treatment assignment:

29. Clinical diagnosis of AD dementia in DS as per International Classification of Diseases 10

(ICD-10).

30. DSQIID >20.
31. Intelligence quotient score ≤40 (KBIT-2).

Contacts and Locations

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Information from the National Library of Medicine NIH NLM

To learn more about this study, you or your doctor may contact the study research staff using the contact information provided by the sponsor.

Please refer to this study by its ClinicalTrials.gov identifier (NCT number): ***NCT05462106***

Contacts

Contact: Olivier Sol, MD +41 21 345 9121 clinicaltrials@acimmune.com

Contact: Benedicte Le +41 21 345 9121 clinicaltrials@acimmune.com

Locations

Spain

Fundació ACE, Institut Català de Neurociències Aplicades — **Recruiting**
Barcelona, Spain

Hospital de la Santa Creu i Sant Pau — **Not yet recru**
Barcelona, Spain

Hospital Clínico San Carlos — **Not yet recru**
Madrid, Spain

United Kingdom

Liverpool University Hospitals NHS Foundation Trust — **Recruiting**
Liverpool, United Kingdom

Re:Cognition Health Limited — **Recruiting**
London, United Kingdom

South London and Maudsley NHS Foundation Trust of The Maudsley Hospital — **Recruiting**

London, United Kingdom

Sponsors and Collaborators

AC Immune SA

Worldwide Clinical Trials

Investigators

Principal Investigator: Michael Rafii, MD University of Southern California, Alzheimer's Therapeuti

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Additional Information:

Related Info EXIT

Responsible Party:	AC Immune SA
ClinicalTrials.gov Identifier:	NCT05462106 History of Changes
Other Study ID Numbers:	ACI-24-AD-DS-2102 2021-006195-17 (EudraCT Number) 2022-500069-29-00 (Other Identifier: European Union Drug Regulatory Authorities Clinical Trial System)
First Posted:	July 18, 2022 Key Record Dates
Last Update Posted:	January 19, 2023
Last Verified:	January 2023

Individual Participant Data (IPD) Sharing Statement:

Plan to Share IPD: Undecided

Studies a U.S. FDA-regulated Drug Product:	No
Studies a U.S. FDA-regulated Device Product:	No

Keywords provided by AC Immune SA:

Alzheimer Disease	**Amyloid** Plaque
Dementia	Beta-**Amyloid**
Brain Diseases	Down syndrome
Central Nervous System Diseases	**Vaccine**
Prodromal Alzheimer's Disease	Immunogenicity

Additional relevant MeSH terms:

Amyloidosis	Neurodegenerative Diseases

Plaque, **Amyloid**
Genetic Diseases, Inborn
Alzheimer Disease
Down Syndrome
Syndrome
Disease
Pathologic Processes
Dementia
Brain Diseases
Central Nervous System Diseases
Nervous System Diseases
Tauopathies
Neurocognitive Disorders
Mental Disorders
Proteostasis Deficiencies
Metabolic Diseases
Intellectual Disability
Neurobehavioral Manifestations
Neurologic Manifestations
Abnormalities, Multiple
Congenital Abnormalities
Chromosome Disorders
Pathological Conditions, Anatomical