

# Phase 1 safety trial for CT1812, a novel small molecule therapeutic targeting a synaptic receptor for Abeta oligomers

<https://neurodegenerationresearch.eu/survey/phase-1-safety-trial-for-ct1812-a-novel-small-molecule-therapeutic-targeting-a-synaptic-receptor-for-abeta-oligomers/>

## Principal Investigators

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## Institution

COGNITION THERAPEUTICS, INC.

## Contact information of lead PI

### Country

USA

## Title of project or programme

Phase 1 safety trial for CT1812, a novel small molecule therapeutic targeting a synaptic receptor for Abeta oligomers

## Source of funding information

NIH (NIA)

## Total sum awarded (Euro)

€ 2,211,622.94

## Start date of award

15/09/2016

## Total duration of award in years

1

## The project/programme is most relevant to:

Alzheimer's disease & other dementias

## Keywords

Acquired Cognitive Impairment... Aging... Alzheimer's Disease... Alzheimer's Disease including Alzheimer's Disease Related Dementias (AD/ADRD)... Brain Disorders... Clinical Research...

Clinical Research - Extramural... Clinical Trials and Supportive Activities... Dementia...  
Neurodegenerative... Neurosciences... Translational Research

### **Research Abstract**

? DESCRIPTION (provided by applicant): Cognition Therapeutics Inc. (CogRx) has discovered CT1812, a novel oligomer receptor antagonist that is the only drug candidate demonstrated to prevent and displace binding of Abeta oligomers to receptors on brain cells. By stopping the initiating event in the Abeta oligomer cascade, this first-in-class drug candidate completely blocks downstream synaptotoxicity and restores memory to normal in aged transgenic mouse models of Alzheimer's disease. CT1812 is an orally administered lipophilic isoindoline formulated as a fumarate salt that is rapidly absorbed and highly brain penetrant. It displaces receptor-bound Abeta oligomers by allosterically antagonizing the sigma-2/PGRMC1 receptor (Izzo et al., 2014a, b). CT1812 thus represents the first disease-modifying therapeutic that will test the oligomer hypothesis of Alzheimer's disease. Such a drug candidate would significantly impact the lives of the 35 million patients worldwide suffering from AD and MCI, for whom no disease-modifying treatment exists. This application proposes to assess the safety and pharmacokinetics of oral doses of CT1812 in a Phase I clinical trial in healthy volunteers. Successful completion of this Phase I safety trial will lay the groundwork for future studies of CT1812 in Alzheimer's patients.

### **Lay Summary**

PUBLIC HEALTH RELEVANCE: Cognition Therapeutics Inc. has discovered a drug candidate that promises to stop and even reverse the memory loss in Alzheimer's disease. This drug candidate, CT1812, works by a completely novel mechanism to stop the binding of toxic proteins that build up in the brains of Alzheimer's patients known as Abeta oligomers. We are requesting funding support to begin clinical trials of this drug candidate in humans in order to measure its safety. Such a drug candidate would significantly impact the lives of the 35 million patients worldwide suffering from Alzheimer's disease and Mild Cognitive Impairment, for whom no disease-modifying treatment exists.

### **Further information available at:**

#### **Types:**

Investments > €500k

#### **Member States:**

United States of America

#### **Diseases:**

Alzheimer's disease & other dementias

#### **Years:**

2016

#### **Database Categories:**

N/A

#### **Database Tags:**

N/A