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2015 Part the Cloud Translational Research Funding for Alzheimer’s Disease

A Single Ascending-Dose, Double-Blinded, Placebo-Controlled Study of an Anti-Tau Antibody

This Phase 1 clinical trial will examine the safety and effectiveness of an antibody against tau to treat various dementias, including Progressive Supranuclear Palsy (PSP) and Alzheimer’s disease.

Tau is a protein thought to play an important role in the development of Alzheimer’s disease. In healthy nerve cells, tau helps to maintain cell structure and transport nutrients throughout the cell. In Alzheimer’s disease and other neurodegenerative diseases such as progressive supranuclear palsy (PSP), tau becomes abnormal and accumulates into tangles, a hallmark of the disease. Tau tangles can be toxic to nerve cells leading to nerve cell dysfunction and death.

Tim West, Ph.D., and colleagues at C2N Diagnostics have developed an antibody, a protein that attacks tau helping to neutralize abnormal tau and remove it. Studies in mice have shown that this specific antibody was effective at reducing levels of tau tangles in the brain, which appears to have translated to improved cognitive function.

The research team plans to conduct a clinical trial in people with PSP to determine safe doses of this antibody. If successful, this study will help determine the optimal dose of the antibody and possibly provide preliminary data on the removal of tau from the human brain. The next step, a Phase 2a trial, will determine if removing abnormal tau results in improved brain function.