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

Trial of Oxaloacetate in Alzheimer's Disease (TOAD) Study

This Phase 1b clinical trial will examine the safety and effectiveness of oxaloacetate as an alternative energy source to improve brain function in individuals with Alzheimer's disease.

The brain's main energy source is sugars taken up from the blood. Brain cells convert those sugars into usable forms of energy through the process of metabolism. During this process, sugars get converted into a series of related chemical compounds, one of which is oxaloacetate. In Alzheimer's disease, the brain's ability to take-up and use blood sugars for energy is impaired, and this impairment may contribute to the decline in brain function during the disease process.

Russell Swerdlow, M.D., and colleagues have proposed a clinical trial of oxaloacetate as a possible substitute energy source for the brain in individuals with mild-to-moderate Alzheimer's disease. The primary goal of this initial trial is to determine which doses of oxaloacetate are safe in humans and have a positive effect on energy production in the brain. The researchers also will use brain imaging to examine how oxaloacetate is taken up and used in the brain. If effective, this study could lead to further clinical trials of oxaloacetate in people who have Alzheimer's disease with the goal to slow, or stop disease progression.

PI

- M.D., New York University
- Director of the University of Kansas Alzheimer's Disease Center and the KUMC Neurodegenerative Disorders Program
- Past Chair (2006/07) of the Alzheimer's Disease and Related Disorders Commission of the Commonwealth of Virginia
- Actively sees patients at University of Kansas Memory Disorders Clinic

Research Category

- Translational Research & Clinical Interventions

Awards

- This is Dr. Swerdlow's first Association award