

"MULTI-TARGET DIRECTED DRUG FOR ALZHEIMER'S" VCU #10-71

Applications

- Treatment of Alzheimer's disease
- Inhibit amyloid-β oligomers, oxidative stress, biometals and lipid rafts
- Potential to slow the progression of Alzheimer's disease
- Diagnostic Imaging of beta-amyloid plaques

Advantages

- · Multi-targeted approach to treat Alzheimer's disease
- Studies indicate ligand crosses blood-brain-barrier

Inventors

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Contact

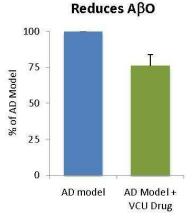
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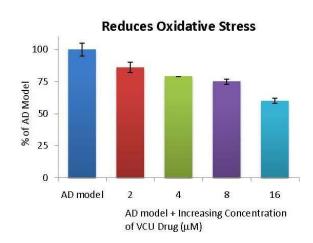
Market Need

Alzheimer's disease (AD) is estimated to afflict 4 million people in the US. The current treatments are limited to symptomatic treatment of cognitive function. The main challenge in AD treatment is its apparent multifactorial nature. This necessitates the progression from single-target drug development to multi-target.

Technology Summary

The invention is a series of novel compounds that are useful for the treatment and prevention of Alzheimer's disease. These compounds target multiple risk factors involved in AD including amyloid- \square oligomers (A \square O) oxidative stress and biometals and cell membrane/lipid rafts. The multifunctional A β oligomerization inhibitors (BMAOIs) strategy targeting CM/LR and other factors involved in the etiology of AD might be an ideal approach to overcome the limits of traditional single-target based approach.





Technology Status

Patent pending: U.S. rights are available - 13/810,826

Please see journal article- Lenhart et al. J. Med. Chem. 2010, 53, 6198-6209.

This technology is available for licensing to industry for further development and commercialization.