Method for Differentiation of Alzheimer’s Disease into Subgroups

FEATURES

Alzheimer’s disease is multifactorial and both clinically and histopathologically heterogeneous. A major hurdle in developing drugs to treat Alzheimer’s disease has been the lack of means to identify the various subgroups of this heterogeneous disorder. In addition, there is no one diagnostic test that can detect if an individual has Alzheimer’s disease. Thus, there remains a need for improved methods for diagnosis and differentiation of Alzheimer’s disease into subgroups. The invention is a method for differentiating Alzheimer’s disease cases into four subgroups based on cerebrospinal fluid levels of three molecular markers (beta-amyloid, tau, and ubiquitin). Each of these molecular markers has been shown to have diagnostic value for Alzheimer’s disease. However, this invention is unique because it uses all three proteins as diagnostic markers. Each of the Alzheimer’s disease subgroups presents different clinical profiles and may benefit from different therapeutic drugs. The present invention may be used to develop therapeutic drugs selective for each subgroup of Alzheimer’s diseases or to evaluate the efficacy of a therapeutic drug on a particular subgroup.

BENEFITS

- Large market – an estimated 4.5 million Americans have Alzheimer’s disease
- Increased diagnostic value – three molecular markers
- Measurable clinical outcome for evaluating therapeutic compounds
- Sensitive immunoassay

INTELLECTUAL PROPERTY STATUS

Patent pending

CONTACT

Dan Potvin, Ph.D., Technology Transfer Associate
Phone: (518) 408-2186
Email: dpotvin@omh.state.ny.us