

Type 2 Diabetes and Alzheimer's Disease: From Common Pathologies to Potential New Therapeutics

Daniel E. Levy, Ph.D.

Abstract

Type 2 diabetes constitutes a major health risk in the United States, with over 20% of individuals over the age of 60 currently suffering from this disease and an additional 1.5 million new cases diagnosed in patients over 20 years of age in 2005. Similarly, Alzheimer's disease represents a major risk to the aging population, with recent statistics estimating up to 16 million people diagnosed by 2050 in the United States alone. As type 2 diabetes and Alzheimer's disease are now recognized as members of the broader class of amyloid diseases and because the pathologies of disease progression between these indications is similar, common strategies focused on the design of next-generation therapeutics can be envisioned and are discussed herein.

J Diabetes Sci Technol 2007;1(4):590-594

Author Affiliation: Pharmadyn, Inc., Sunnyvale, California

Abbreviations: (AD) Alzheimer's disease, (PPAR γ) peroxisome proliferator-activated receptor γ

Keywords: Alzheimer's, amyloid, diabetes, insulin, islet, pancreatic, neuronal, plaques

Corresponding Author: Daniel E. Levy, Ph.D., Vice President of Research and Development, Pharmadyn, Inc., 525 Del Rey Avenue, Suite B, Sunnyvale, CA 94085-3515; email address dani@pharmadyn.com