

DEVELOPMENT SCIENCES

Blood Based Biomarkers in Alzheimer's Disease

LEARN MORE ABOUT HOW OUR SCIENTISTS IN DEVSCI ARE UTILIZING BLOOD BASED BIOMARKERS TO PRE-SCREEN FOR AMYLOID POSITIVITY IN ALZHEIMER'S DISEASE

the disease



Alzheimer's disease (AD) leads to nerve cell death and tissue loss throughout the brain. Over time, the brain shrinks dramatically, affecting nearly all its functions.

Disease modification can be defined as treatments or interventions that affect the underlying pathophysiology of the disease and have a beneficial outcome on the course of AD.

IT'S HARD TO OVERSTATE HOW IMPORTANT FINDING A RELIABLE, AFFORDABLE, AND EASY-TO-USE DIAGNOSTIC IS FOR STOPPING ALZHEIMER'S.

-Bill Gates; who donated \$50M to AD Research

why it matters



Once there is a disease modifying treatment (DMT) available for Alzheimer's disease, there will be >100 million people in the world with memory complaints. Of those, >50 million will have memory complaints due to AD.



While testing for amyloid positivity will likely be a prerequisite to access DMTs, current global diagnostic capacities and associated costs do not support the diagnosis of >100 million people.



The best way to diagnose AD is through a spinal tap or a brain scan. The problem is that the former is invasive and the latter is expensive. Plus, many patients don't get these tests until they start showing signs of cognitive decline, which means the disease may already be fairly advanced.

our work

A FEW HIGHLIGHTS OF OUR SCIENTIST'S EFFORTS TOWARDS THE FUTURE OF EARLY DETECTION FOR ALZHEIMER'S:



WHAT WE ARE TRYING TO ACCOMPLISH

A commercially available, minimally invasive, cost-effective biomarker to pre-screen patients for amyloid positivity in clinical routine. This will allow us to tailor the treatment plan for patients.



OUR EFFORTS

In collaboration with Roche Diagnostics, we are evaluating blood based biomarkers to pre-screen for amyloid positivity.



WHY AMYLOID POSITIVITY IS IMPORTANT

Patients who test positive for amyloid have a high likelihood of having cognitive impairment due to Alzheimer's disease.



The blood based biomarker project thus far, has been supported by the Crenezumab and Gantenerumab programs and will continue to be supported by external funding.

the value

The pre-screening biomarker may increase the number of patients treated by improving the efficiency of PET/CSF testing

Enables selection of true Alzheimer disease patients for clinical trials Aids in the diagnosis of Alzheimer's disease to ensure proper care and treatment in clinical routine

the future

MINIMALLY INVASIVE AND COST EFFECTIVE TESTING

2 early detection

PERSONALIZED TREATMENTS

