

We are on a moonshot using digital biomarkers to support finding a cure for Alzheimer's

Altoida, Inc.

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- The biggest problem with Alzheimer's Disease (AD) today is that 75% of the cases are diagnosed too late, when major damage to the brain has happened already. Studies today show that diagnosing the disease 5-6 years earlier than its onset and triggering prevention strategies, could add up to 10 more brain health years, through lifestyle regulation.
- We are on a moonshot mission that consists of three steps: 1. Enable the delay of AD onset using prevention tracking with high-dimensional and high-frequency cognitive outcomes through behavioral phenotyping, 2. Enable presymptomatic stage trials of chemical compounds / molecules combined with Digital Health behavioral change interventions (Digital Pill) and ultimately 3. Assemble and Integrate diverse digital phenotyping data in order to build a sensitive neural response model and come up with a cure to a disease that is still unsolved today.
- Based on 8 years of clinical data from 2722 patients, that were generated at Pharmacog (EU equivalent to ADNI), an unprecedented study involving 22 different study sites and 32 academic and industry actors from 7 countries, we have developed a diagnostic technology ("Neuro Motor Index") that can identify Prodromal AD up to 6 years before it's actual onset. Our technology (data ownership fully with Altoida) captures 250 features at 300 Hz and combines visuospatial function as well as spatial navigation biomarkers from instrumental activities of daily living (iADL). This rich features set is making Neuro Motor Index earlier and more precise than any other digital diagnostic technology on the market today.
- The technology will be commercialised in both B2B and B2C markets in the US. End consumers will have access to an iPhone app that allows them to get a risk scoring and a recommendation whether to see a specialist for further examination or not. Doctors and neuro disease specialists will be able to use an iPad app as a medical device (FDA 510k) to conduct early screening.
- After having successfully rolled out our neuro motor index technology, we will be in the ideal position to support an ecosystem of early screened persons at risk as well as diagnosed patients. This ecosystem will be of great value for pharma (novel marker for drug R&D, assessing treatment and intervention effects), doctors/specialists (lead generation, disease management through clinical pathways tracking) and both conventional and digital therapeutics providers (tracking of physical exercise, nutrition and other lifestyle factors).
- The founding team of Altoida comes with a unique combination of highly renowned scientific research on AD, medical device and machine learning background as well as very successful business track record. Our approach and technology has received numerous awards and recommendations from both science and industry: Alzheimer's Organisations EU & CH, EU Innovative Medicine Initiative, Global Brain Health Initiative, Novartis etc.

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