



Deep Learning Solutions for Early
Diagnosis of Alzheimer's Disease

Introduction

Global Shortcomings in Tackling Dementia



+10M Global New
Cases / Year



Rapid
Cognitive Decline



Ineffective Traditional
Methods

Problem

41 out of 55 million people living with dementia **remain undiagnosed** (75%).

- Low awareness & Stigma.
- Primary-care screening is limited in early detection.
- Many cases are never diagnosed or only identified late — therapeutic window and prevention opportunities lost.

Source: [ADI](#), [Cognitive Tests to Detect Dementia](#)

**Delayed
Diagnosis**



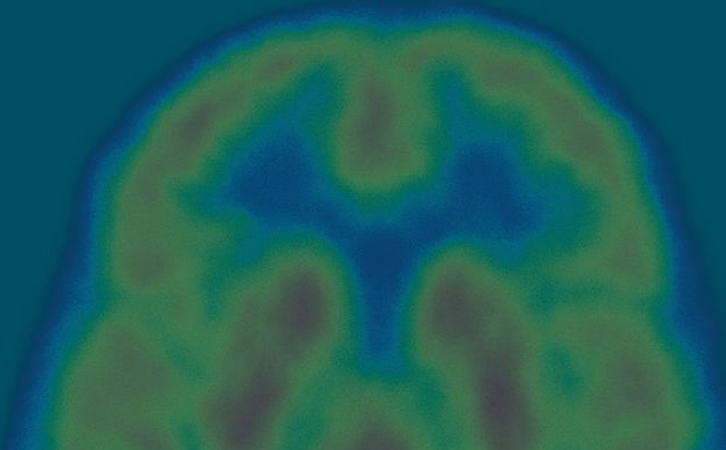
**Delayed
Care**



**Higher
Costs**

Solution

A deep learning—based software that empowers clinicians to screen, diagnose and predict Alzheimer's disease — **earlier and more efficiently.**



Comprehensive Diagnostic Tool

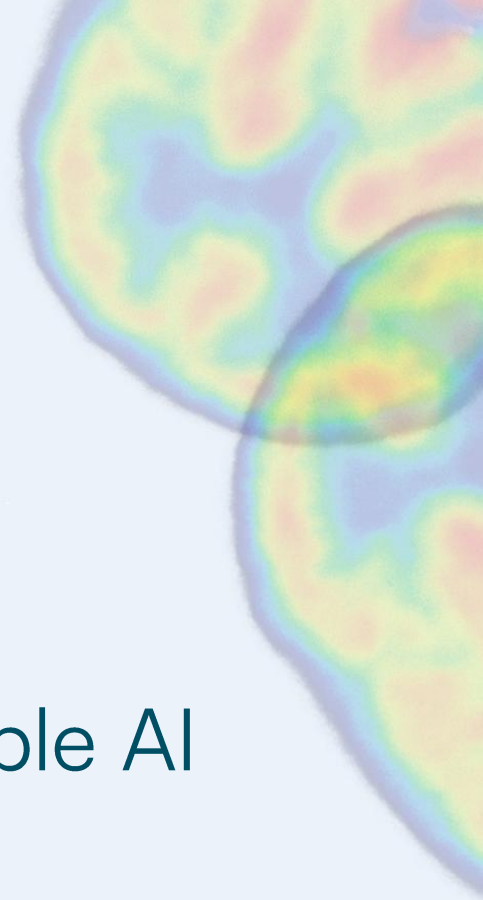
Early Detection = Earlier Action

Scalable Solution

Why Now

- **Undiagnosed Epidemic**
- **New Treatments Need Early Detection**
- **Tech Breakthroughs** → Deep learning + explainable AI
- **Global Momentum** → Aging Population

A once-in-a-generation opportunity for scalable, AI-driven diagnosis

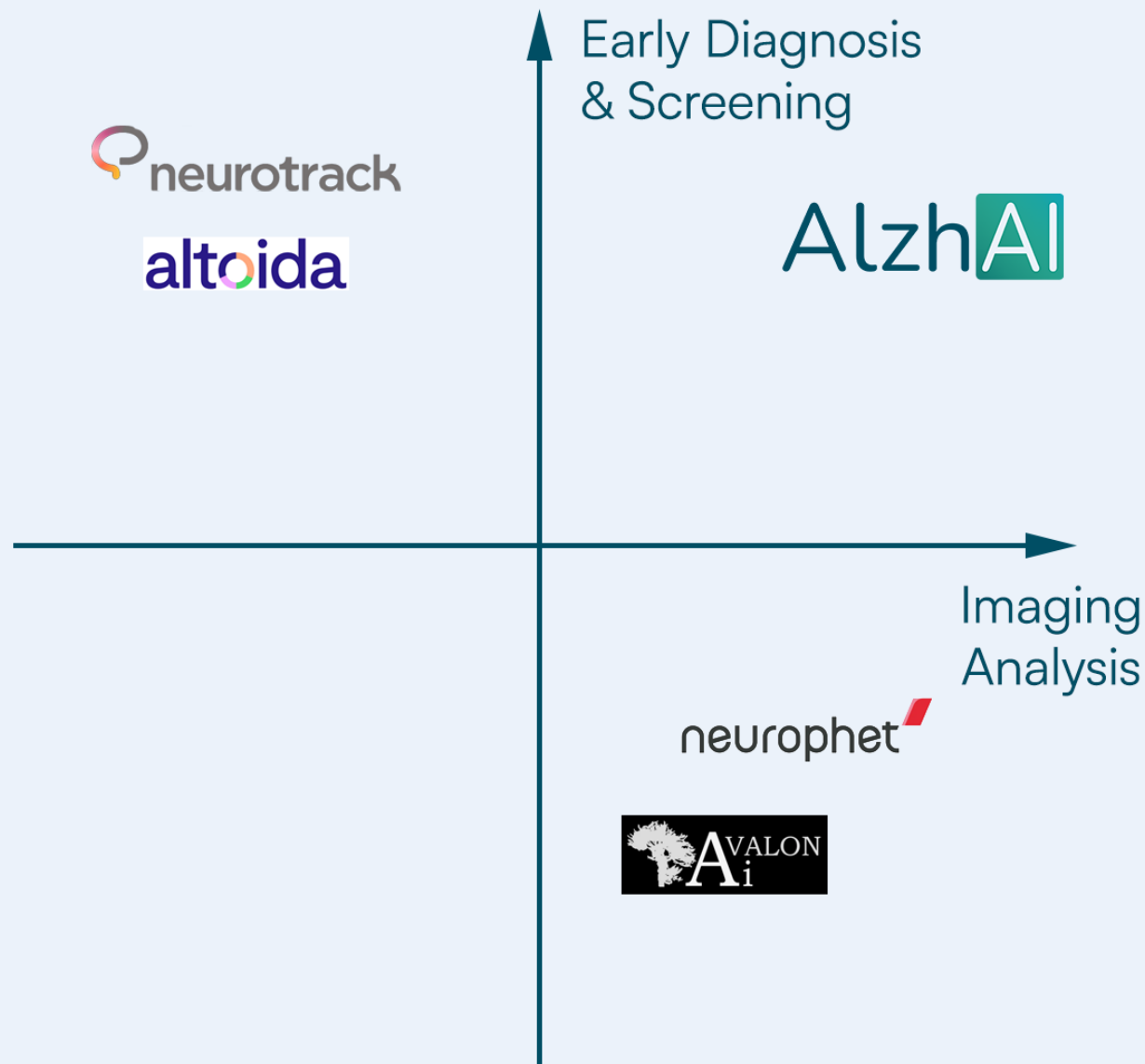


Market size

- **Lower-Bound TAM** : Global Individuals with Dementia ~ 57 million
10 million new cases per year
- **SAM** ~ 7,85 million individuals living with dementia in Europe
1.3 million new cases per year
- **SOM** ~ 200k individuals living with AD and MCI in Lombardy
25k new cases per year

Competition

AlzhAI wants to bridge **low-cost** clinical data with **imaging AI** — enabling **continuous patient tracking** from early detection to late-stage care.



Product

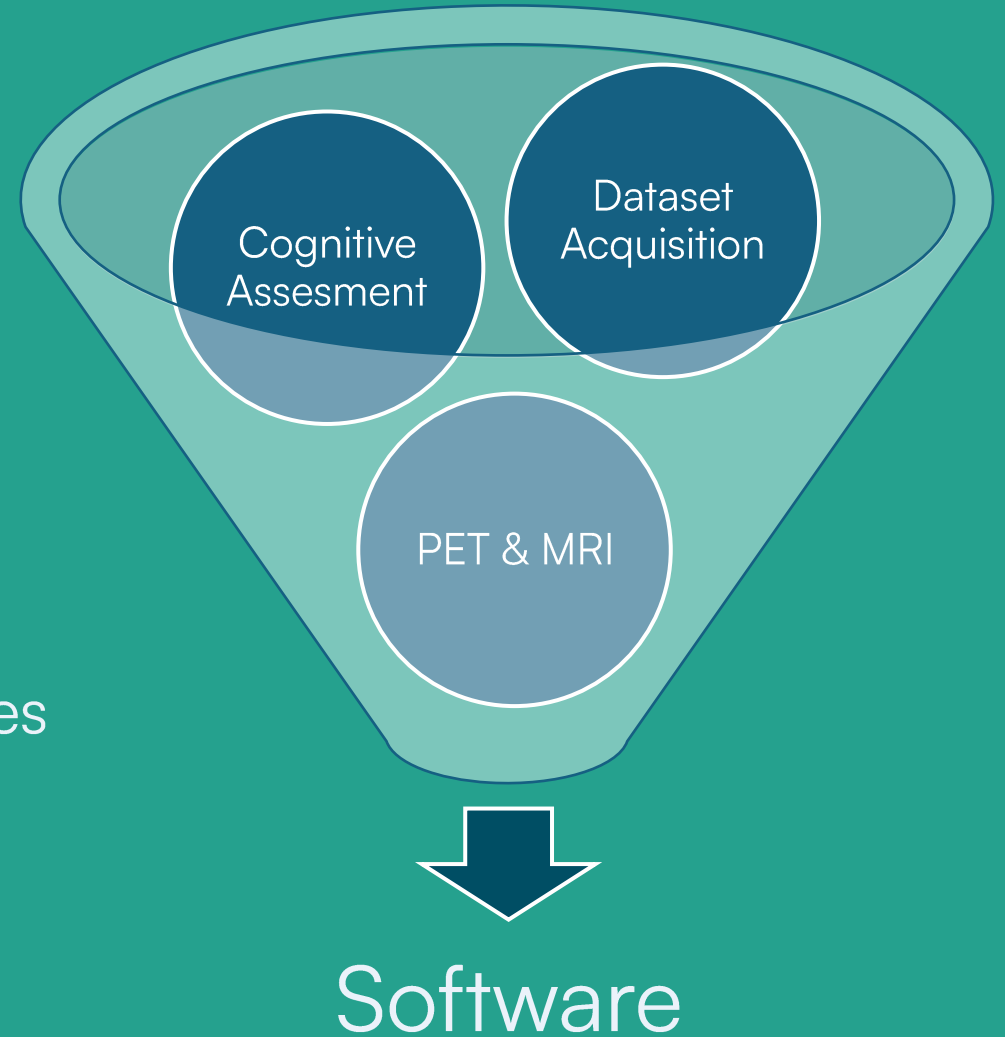
- **Easy & Fast Software**

Analysis, Monitoring, Diagnostic support

- **Screening & Early Detection**

At-risk patients in the presymptomatic stages

- **Longitudinal Patient Tracking**



Use Cases

It's Just Aging... Right?



Worried
But Unaware

Symptomatic,
But Misunderstood



Long-Term
Care Optimization



Target Clients

- Private Clinics & Imaging Centers
- Public Hospitals (Neurology, Geriatrics)
- RSA/ Nursing Homes



Business Model

SaaS Deep Learning Diagnostic Platform → Pay-per-Use

Screening

10€ / usage

Screening tool.
Individual **risk factors analysis**
and global
cognition synthesis

MRI

30€ / usage

Decisional
transparent tool to
support clinicians
in **early diagnosis**

PET

50€ / usage

Transparent tool
to support
clinicians in early
prediction and
diagnosis with
higher accuracy

Team

 Daniele **De Carli**

BSc Student in Engineering Physics



 Alberto **Sudati**

BSc Student in Engineering Physics



Working together in Laika Aerospace; developing and building low-budget solid propellant rocket. Both Attended 3° edition of Startup Bootcamp.