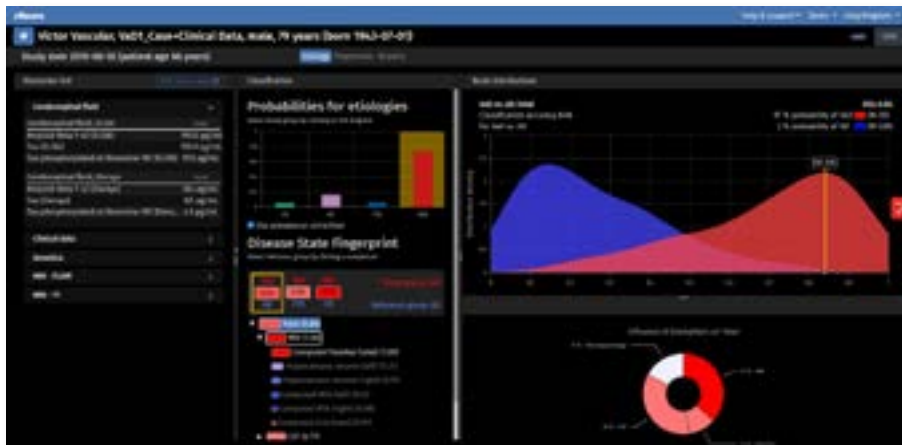


cDSI™ Application

cDSI is a unique, cloud-based, AI-driven clinical decision support tool for neurodegenerative disorders.

Dementia

As people are aging, the number of people with dementia is multiplying. But dementia is an under-diagnosed condition — it can be hard to diagnose accurately, and even when diagnosed, it is often too late. We assist neurology groups and specialists by integrating and managing the increasing number of biomarkers to simplify the complexity and supporting entire care pathways in a digitized and holistic way.



By comparing the similarity of the patient's condition with established disease patterns from a large database of previously diagnosed patients, cDSI enables early detection, prediction of disease progression and long-term outcomes based on temporal changes, and insights on treatment plans. It also supports decisions regarding additional testing needed to determine a diagnosis and true differential diagnosis using decision models for a range of neurodegenerative disorders.

“

“cDSI and cMRI has become an indispensable tool for us [in the memory clinic], as the quantified information helps with differential diagnosis and assessing whether cognitive issues are due to dementia.”

MARIE RYDÉN

Geriatrician and Head Clinician
at the Memory Clinic,
Karolinska University Hospital

How does cDSI benefit clinicians and their patients?

cDSI combines all patient data and compares it with a large database of previously diagnosed patients to provide information about:

- Which disease is the most probable
- The patient's progression
- Whether more testing should be done
- Assessment of treatment plans including for Disease Modifying Drug (DMDs)



cDSI supports clinicians with making confident, evidence-based decisions:

- Earlier detection based on similarity with established disease patterns in the validated patient database
- Faster and more confident differential diagnosis by combining all relevant patient data and comparing with thousands of cases with different forms of dementia
- Probabilities for etiology classification that are available uncorrected or can be corrected for prevalence
- Insights about whether additional testing (e.g., lumbar puncture, amyloid PET) would be helpful for assessment
- Differential diagnosis using available decision models for Alzheimer's disease (AD), frontotemporal dementia (FTD), vascular dementia (VaD), and cognitively normal
- Prediction of disease progression and long-term outcomes based on the disease pattern and temporal changes
- Monitoring of changes over time
- Assessment of treatment plans
- Better communication with patients and caretakers



What is unique about cDSI?

→ **Single location** for key patient data using **vendor-agnostic inputs**

Demographics

- Age
- Gender

Other biomarkers

- CSF
- APOE

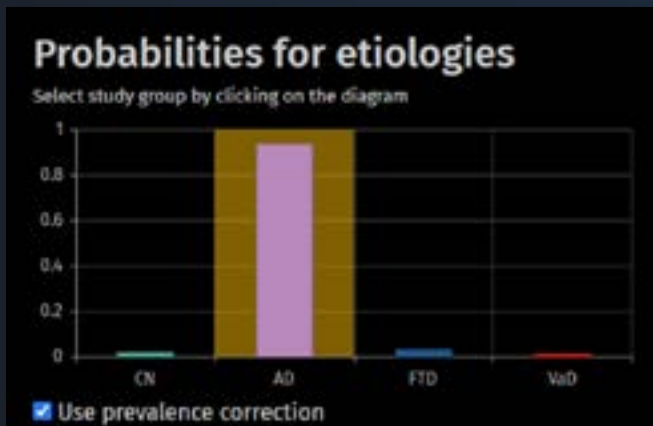
Clinical and neuropsychological tests

- MMSE
- MoCA
- RAVLT/CERAD recall and delayed recall
- TMT A&B
- Animal fluency
- NPI

Validated cMRI imaging biomarkers

- Volumes on brain structures
- Lesion load
- Disease-specific biomarkers

→ **Probability diagram** listing etiology groups and allowing the selection of the study group in the differential diagnosis view



→ Compact, intuitive, and comprehensive **visualizations of the data and comparisons** using our patented disease state fingerprint technology



→ Algorithms that **drive decision models** to support differential diagnosis

→ Calculation of a **quantitative estimate (our disease state index)** of how similar a patient's profile is to those of other patients in the large database of reference patient cases

Differential diagnosis report

This unique, industry-first report leverages machine learning to enable differential diagnosis using sophisticated dementia biomarkers and comparison against a large database of real-world data.

Dementia-specific biomarkers

Understanding and measuring patient values against distributions of imaging biomarkers in different diagnostic groups can support a confident and accurate dementia diagnosis.

Measures against real-world data

Other reports measure values against cognitively normal reference data. Ours uses a large database of patients diagnosed with dementia, AD, or related conditions.

Reliant on MRI data only

Machine learning is utilized to analyze our sophisticated biomarkers and produce a differential analysis from MRI imaging only in this industry-first report. The report is viewable in light and dark themes.



[View our reports online >](#)





Learn more about cNeuro®

Deploy and integrate

Quickly and easily deploy our neurological imaging AI solutions that are fully compatible with your existing systems and workflows.

Secure your data

Certified information security (ISO-27001) ensures personal health information (PHI) is safe.

Focused specialist training

Our dedicated tailored training program delivers focused sessions for physicians and MRI technologists.

Simplify support and updates

Our world-class customer support streamlines ongoing performance management and provides seamless delivery of managed updates.

Why Combinostics?

Combinostics offers the only neurological imaging and decision support AI solution spanning the entire patient care pathway for the early detection, diagnosis, and ongoing management of major neurological disorders.



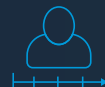
Improve detection

Detect neurological disorders earlier and diagnose them faster, by leveraging our extensive reference data and biomarkers.



Differentiate between diagnoses

Go beyond the measurement of volumes with a differential diagnosis of dementia, which supports better treatment decisions, including eligibility for disease-modifying drugs.



Plan and monitor

Predict disease progression, detect side effects, and longitudinally track the patient's status.

OUR PARTNERSHIPS

