Combinostics

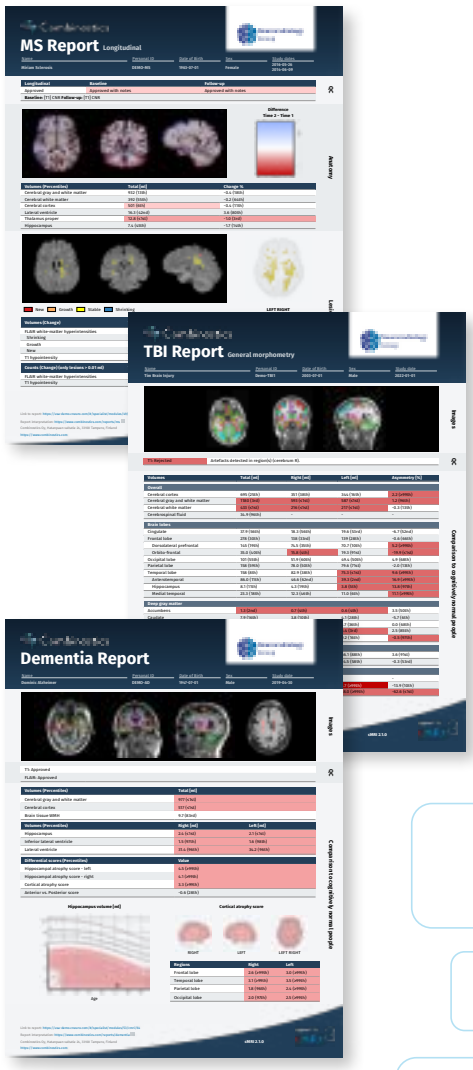
cMRI™ Application

cMRI is a cloud-based, AI-driven tool that fully automates brain MRI quantification.

How does cMRI impact patient care?

MRI brain imaging is a critical tool for assessing between neurological disorders such as multiple sclerosis (MS), traumatic brain injury (TBI), epilepsy, and dementia. cMRI provides fully automated, objective quantification of patterns in brain volume and lesions from MRI images, including subtle changes and characteristics that are difficult to detect using visual assessments alone.

cMRI ensures consistently high-quality reads and increases throughput by reducing the time spent per image read. Its automated reporting features easy-to-read, objective, clinically meaningful data to improve collaboration and communication with referring clinicians and help reduce image-related queries.



Clinicians benefit from:

- Faster, meaningful **results**
- High-quality, objective **assessments**
- Clearer **communication**

With cMRI, radiologists will benefit from:

Consistent and reproducible quantification via AI tools:

- Objective quantification of disease-specific abnormalities and patterns to identify subtle, disease-specific changes and patterns in brain volume and lesions that are difficult to detect using visual assessments alone
- Dedicated reporting for dementia, MS, and other indications, such as TBIs, including disease-specific reports available in light or dark theme
- Dedicated visualization tools to review longitudinal data and evaluate longitudinal change in atrophy and lesions (e.g., in MS)
- Highly robust and reliable segmentation, and flexibility against different patient positions in the scanner

Improved workflow and productivity:

- Increased throughput by reducing the time spent per image read
- High-quality reads with fewer resources
- Reduced variability in radiological interpretation

A platform to share with referring clinicians:

- Fewer image-related queries from referring clinicians due to easy-to-read, objective, clinically meaningful data
- Easier collaboration with referring physicians to facilitate the management of patients with complex diseases and more effective drug selection
- Better communication with and increased satisfaction of referring clinicians

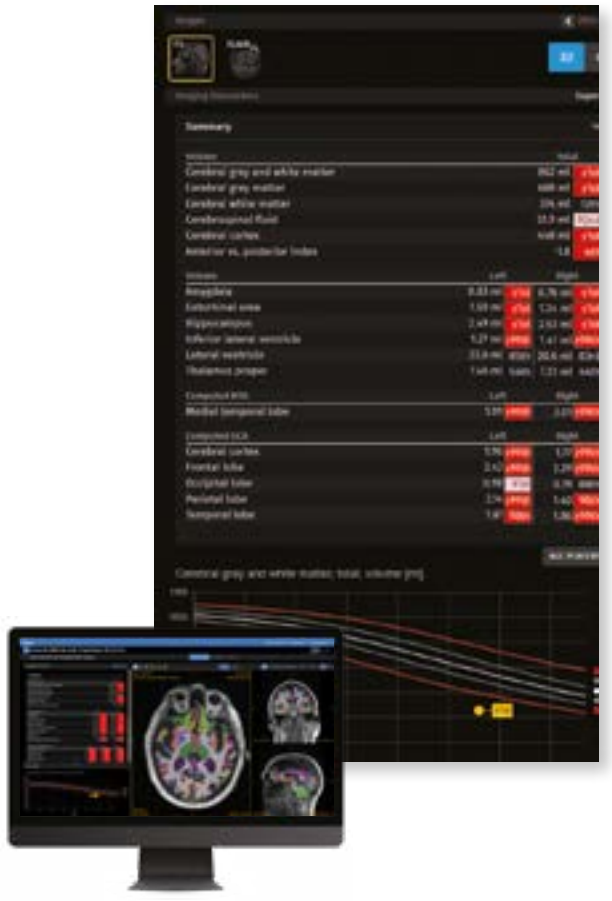
What are the capabilities of cMRI?

Fully automated, reliable, reproducible analysis of brain T1 and FLAIR MRI:

- Segmentation of 133 regions and calculation of 200+ volumes and biomarkers
- T1-hypointensity volumes and counts
- White matter lesions (FLAIR) and lesion counts
- A rich set of validated imaging biomarkers and additional disease-specific biomarkers
- Quantification of longitudinal changes in brain structures, atrophy, and lesions

Statistical comparison of results to a large database of normative reference data adjusted for age, sex, and intracranial volume

Seamless integration with PACS to view the results and push reports and labeled volumes from cMRI back to PACS; results also viewable via the browser-based **viewer**



Detailed, disease-specific reports

Improve communication with clinicians.

Dementia Report

Evaluate the impact of dementia by quantifying volumes and specific imaging biomarkers relevant to a differential diagnosis of dementia.

Dementia Report: Differential Analysis (cDSI™)

Attain a real differential dementia diagnostic trend via this report. It uses disease-specific biomarkers to define the underlying etiology, which is essential for disease management and monitoring.

MS Report

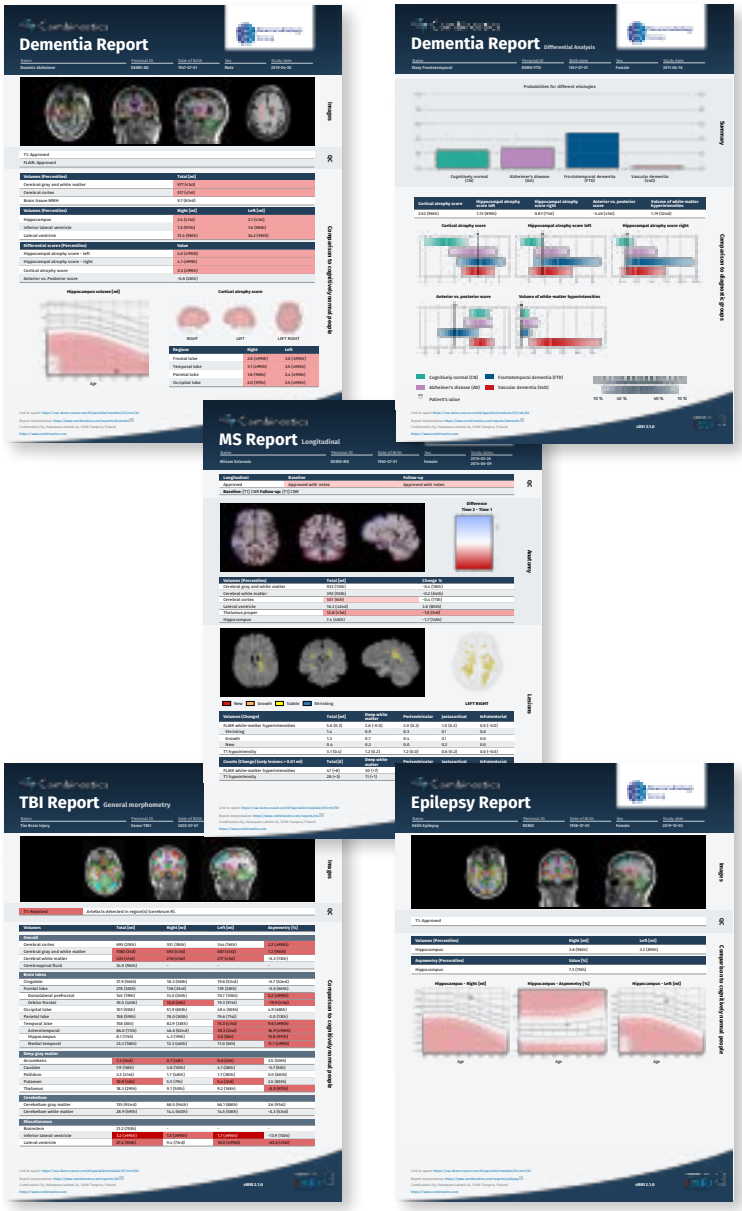
Evaluate the impact of MS using cross-sectional and longitudinal reports of automated quantification of lesion counts and volumes over time and contrast them with those of normative populations.

TBI Report

Quickly evaluate the impact of TBI using morphometry and lesions reports that allow you to assess injury distribution and severity and draw inferences to support your clinical impression.

Epilepsy Report

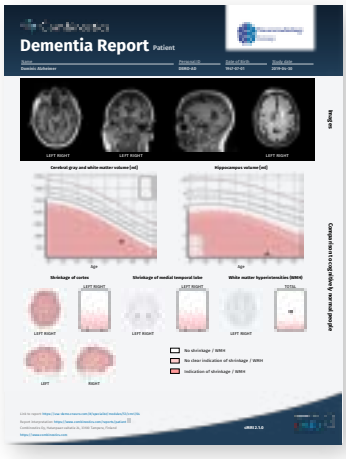
Evaluate the impact of epilepsy using automated quantification of hippocampal volume and asymmetry from T1 and contrasting the imaging biomarker values with age, gender, and intracranial volume-matched normative population using percentiles.



Improve communication with patients.

Dementia Report: Patient

Use this dedicated report to communicate with patients to help them understand the situation and openly discuss additional diagnostic requirements and treatments.



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, and longitudinally track the patient's status.

OUR PARTNERSHIPS

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