



Transforming Patient Care Through Imaging AI



3DR Labs, LLC partners with **icomatrix** to provide hospitals and health systems with access to AI-based **icobrain** reports.

With the highest accuracy, **icobrain** enables physicians to better identify abnormalities and structural changes in patients suffering from:

- Multiple Sclerosis
- Epilepsy
- Dementia
- Stroke



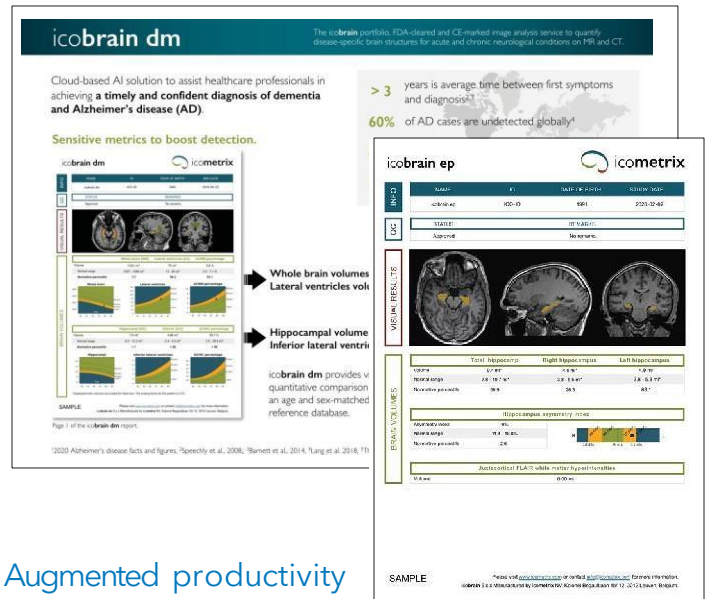
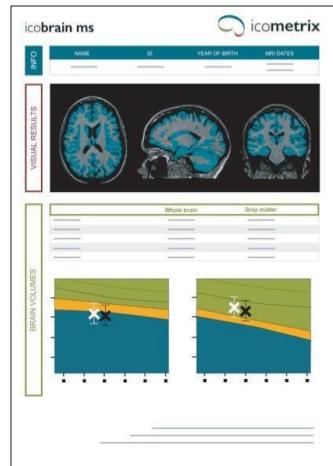
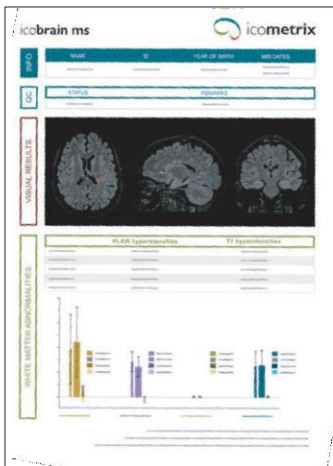
How does icobrain work?

icobrain uses artificial intelligence to measure brain volumes, abnormalities, and subtle brain volume changes over time. **icobrain** aligns brain scans with a reference atlas, and segments multiple brain structures. Tailored to each condition, brain volumes are measured and normalized for age, sex, and head size before being compared to a normal reference database.

Why can icobrain benefit you?

icobrain generates a report that assists radiologists and physicians in the diagnosis and monitoring of a patient's status. By tracking (sub)clinical disease activity and progression, clinicians can work towards earlier diagnosis and treatment optimization and make a better-informed decision about their patient's health.

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- The use of icobrain can reduce the duration of suboptimal treatment for multiple sclerosis patients from 2.8 to 1.2 years by permitting the inclusion of the brain and lesion volume change findings into their disease management.
 - 26% of people with multiple sclerosis are on a suboptimal treatment.
 - Tracking brain volume changes and abnormalities can help to monitor and optimize treatment sooner.
- The average time between first symptoms and a firm diagnosis of dementia is only one year.
 - Identifying patterns in brain volume loss can help pinpoint your diagnosis and care path.
- Up to 30% of hippocampal sclerosis cases in epilepsy are missed on conventional MRI.
 - Can help detect subtle asymmetries, increasing your chance for a seizure-free outcome.

Augmented productivity

- 60% faster reporting
- Addressing increasing radiology workload

Optimized sensitivity consistency

- Improved detection
- Lower intra- and inter-rater variability

Improved patient care

- Earlier diagnosis prediction of disability
- disease progression and treatment response
- Improved quality of life

I feel icobrain's AI is better at diagnosing hippocampal loss compared to visual rating. Whilst with the volumetric report, we clearly see hippocampal loss, we could not identify this by visual assessment (MTAScore).

Dr. Roeck, MD, Radiologist AZ Herentals, Belgium

Reference: Diana M. Sima et al.- Brain Sci. 2021, 11(12), 1570 ("HealthEconomic Impact of Software-Assisted Brain MRI on Therapeutic Decision-Making and Outcomes of Relapsing-Remitting Multiple Sclerosis Patients-A Microsimulation Study") - <https://doi.org/10.3390/brainsci11121570>