TERARECON
A ConcertAI Company

A Comprehensive Neuroradiology Suite on one Platform

In our Neuro Suite, we have handpicked what you need.

The Neuro Suite is a vendor-neutral comprehensive suite of Neurology AI algorithms that aid in the analysis and interpretation of neuroimaging treatment decisions for neurovascular diseases, neurodegenerative diseases, brain lesions both cancerous and noncancerous, and epilepsy.

Neuro Suite possible applications to aid the physician:*

- Stroke
- Neurooncology - brain tumors
- Multiple sclerosis
- Dementia/Alzheimer's
- Epilepsy
- Moyamoya disease
- Intracranial stenosis
- Cerebral Small Vessel Disease
- Traumatic Brain Injury
- Subarachnoid Intracerebral Hemorrhage
- Vasospasm

The Neuro Suite is a set of hand selected algorithms to fit your individual needs.

One platform, one stop, for all your AI needs in Neurology.

* Subject to availability and clearances

PARTNERS OVERVIEW

Combinostics

Combinostics is committed to persistently innovating, with the goal of bolstering clinicians' ability to provide the highest quality care for their patients with neurological disorders.

Drawing on a rich, collective background in science and research, Combinostics leverages their understanding of neurological conditions, their enthusiasm for innovative technologies like artificial intelligence, and the insights gained from partnerships with clinical care centers. This enables them to create novel solutions that address the unmet needs in the clinical care of chronic neurological conditions, primarily neurodegenerative diseases, epilepsy, and MS.

At the heart of Combinostics' innovations is their brain segmentation algorithm. This sophisticated tool empowers clinicians by providing critical insights into differentiating among some of the most complex neurodegenerative conditions.

Imaging Biometrics

Imaging Biometrics has capitalized on the prevalence of perfusion MRI widespread acceptance and focused on providing insightful information regarding brain tumor vascularization. Imaging Biometrics focuses on technology that complements perfusion MRI and can provide critical physiological information to complement anatomical imaging in diagnosis, treatment planning, monitoring and follow-up for brain tumors. With its flagship product IB Neuro, which is used for perfusion MR for brain tumors correlations via stereotactic tissue and outcomes measurements,, Imaging Biometrics has expanded it's product line with IB DCE, IB Delta Suite, and IB Diffusion to provide more robust tools to aid the physician in monitoring of neurological diseases.

Cercare Medical

Cercare Medical is a pioneering provider of medical imaging technology, offering advanced solutions for neurological diseases. With its sophisticated perfusion analysis and AI-based postprocessing workflows, Cercare Medical provides valuable insights into brain tissue status assessment, including microvascular integrity, function, and oxygenation.

Its biomarker analysis and decision support tools enable healthcare professionals to provide more personalized patient care. Cercare Medical is compatible with most major scanner and PACS providers, offering easy integration and efficient workflow.

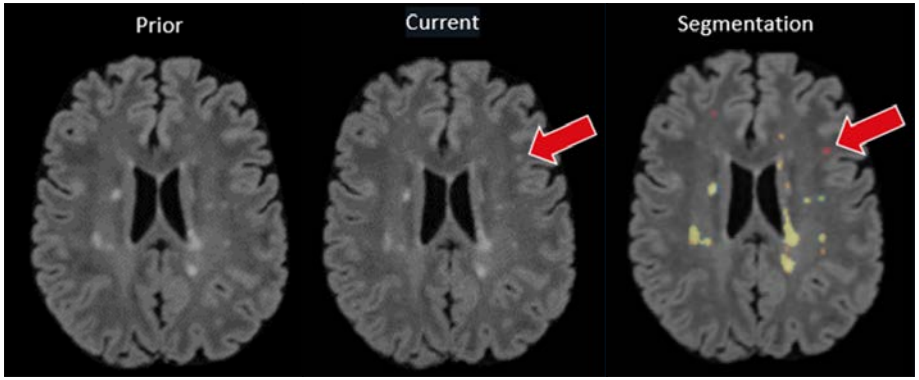
With its efficient care and easy-to-use technology, Cercare Medical is a reliable and advanced choice for perfusion imaging solutions.

COMBINOSTICS

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

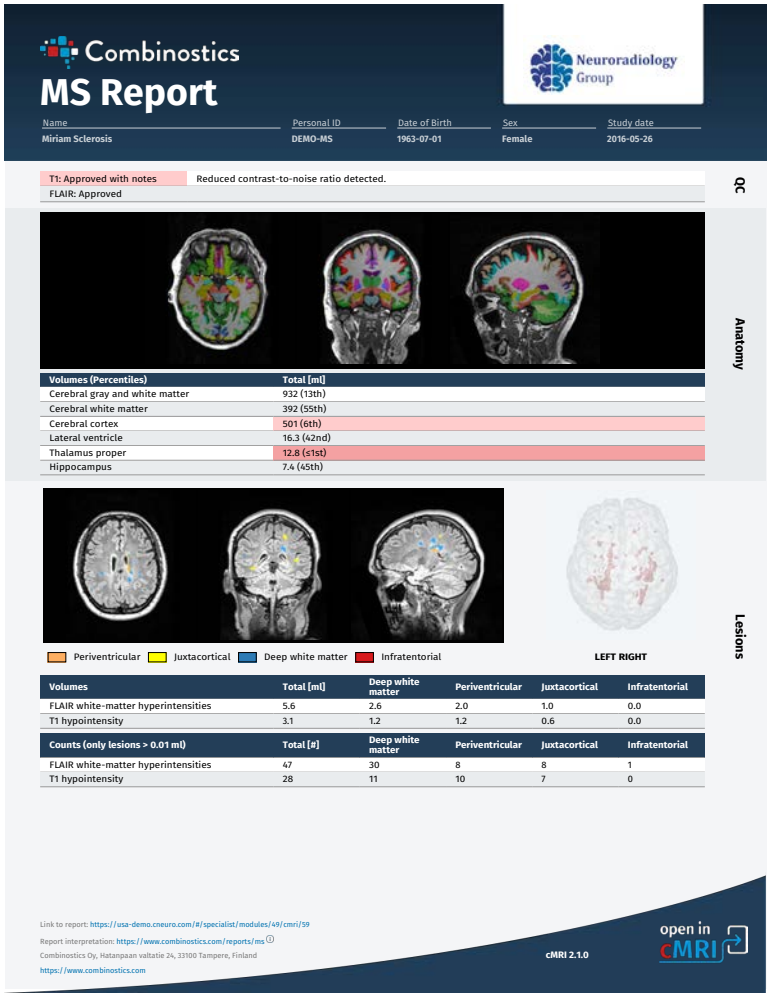
cMRI ensures consistently high-quality reads and increases throughput by reducing the time spent per image read. Its automated reporting features easy-to-read, objective, clinically meaningful data to improve collaboration and communication with referring clinicians and help reduce image-related queries.

- **Increase Productivity:** Save time assessing neurological studies More consistent comparison: comparing data over time along with comparison to normative database will allow for a more reliable conclusions.



- **Improve consistency and reproducibility:** With automated segmentation and quantification
- **Communicate Results:** Automatically generated Specific reports, tailored for both clinicians and/or patients
- **Dedicated tools:** For dementia and MS and other indication such as TBIs

- 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)



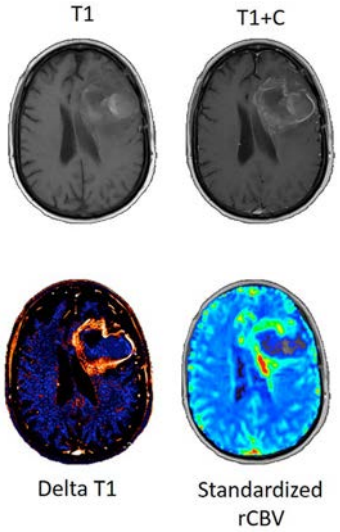
- cMRI Results Available in your PACS or other medical record location.

IMAGING BIOMETRICS

Neuro Suite possible applications to aid the physician:

- Brain tumors

The technologies available within IB Delta T1 and IB Neuro provide critical and complementary information useful for accurate and quantitative neuro assessment. Specific to brain tumors, Delta T1 maps provide objective areas of true contrast enhancement. Then, within those regions, IB Neuro (sRCBV) uses clinically validated technology proven to distinguish tumor from non-tumor tissue based on tissue vascularity.



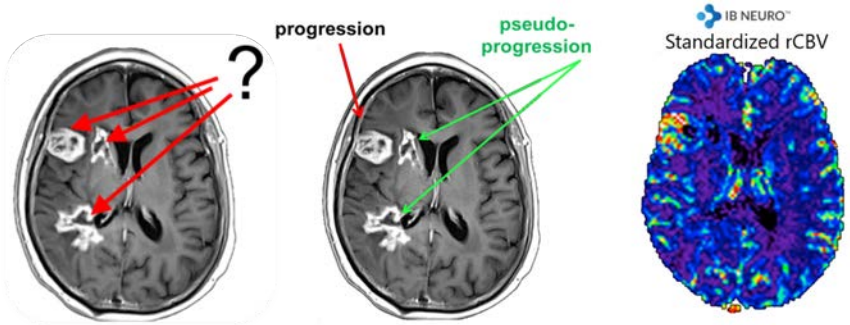
Contrast-enhanced MRI (CE-MRI) is considered the gold standard for evaluating brain tumor response to therapy. Yet, CE-MRI is limited in its ability to distinguish brain tumor recurrence from treatment effect. Using conventional CE-MRI, the only way to confirm diagnosis is via invasive surgical biopsy.

IB Delta T1 maps are calibrated (quantitative) difference maps that show regions of true contrast agent enhancement that are not confounded by bright pre-contrast T1 signals, such as post-surgical blood product, imaging artifacts, etc.

And standardized rCBV (IB Neuro) is the only platform proven to answer the most challenging question facing neuro-oncologists today, “Is the enhancing region tumor, or is it an effect due to treatment?”.

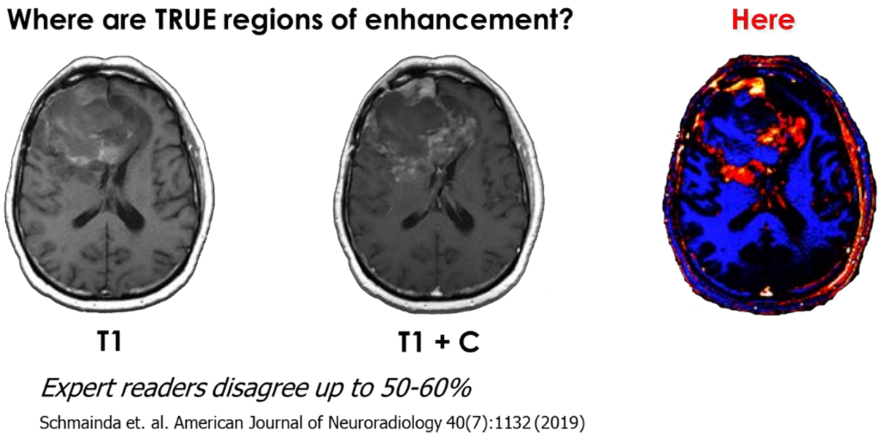
IB Neuro

- IB Neuro uses a proprietary implementation of a proven leakage-correction algorithm to compute dynamic susceptibility contrast (DSC) MRI derived parameters including relative cerebral blood volume (rCBV) maps that show the distribution of blood vessels throughout the brain.
- IB Neuro is the only quantitative DSC-MRI algorithm available. It uses a built-in image standardization technology that renders the manual (and inherently variable) tissue-normalization techniques obsolete.
- IB Neuro is the only DSC-MRI platform used in multi-center clinical trials.
- Multiple independent sites have validated IB Neuro’s output with actual tissue biopsy samples.
- IB Neuro has been shown repeatedly to accurately distinguish tumor from treatment effect.
- IB Neuro is the only DSC-MRI platform proven reliable using 50% less gadolinium-based contrast agent. Using a low flip angle acquisition and IB Neuro post-processing, 50% less contrast can be used with results comparable to the accepted double Gd dose method.
- IB Neuro is useful for:
  - Non-invasively grading tumors
  - Guiding biopsy targets (ensuring the most aggressive part of the tumor is sampled to avoid underestimating the aggressiveness of a tumor)
  - Surgical navigation and resection assessment
  - Monitoring treatment response (direct longitudinal comparison between MR exams)
  - Earlier indication of treatment response (including new drug development efficacy)



IB Delta T1 Maps

- IB Delta Suite software uses proprietary processing methods to create dT1 (“Delta T1”) maps. These calibrated difference maps show areas of true contrast agent enhancement that are not confounded by bright T1 signals, such as those resulting from blood products.
- For the evaluation of treatment - The dT1 maps can make it easier to visualize the true spatial extent of the contrast-agent enhancing tumor after treatment, when the contrast-agent enhancement can be more subtle or mixed in with treated non-tumor tissue.
- For the evaluation of surgery - dT1 maps offer an elegant solution to accurately determine the extent of tumor resection, an important indicator of prognosis.
- For Clinical Trials - Because dT1 maps are calibrated and quantitative, the determination of the contrast-enhancing region of interest (ROI) can be determined automatically and consistently across time and patients for all MRI vendors and field strengths. dT1 has been a huge win for clinical trials!



IB DCE

- IB DCE™ software analyzes conventional T1 weighted images and generates an array of relevant perfusion and permeability parameters. Employing the extended Tofts, Tofts, and Patlak models, contrast agent permeability analysis is intuitive and designed with the same user interface as other IB software products.
- KEY FEATURES OF IB DCE™ SOFTWARE
  - Fast generation of perfusion parameter maps (Ktrans, Ve, Vp, T10, Initial Slope, Time to Peak (TTP), Peak Enhancement, initial area under curve (IAUC)
  - Accurate implementation of the extended Tofts, Tofts, and Patlak algorithms
  - Automatic generation of Vascular Input Function (VIF)
  - Automatic selection of flip-angle series to process.
  - Ability to output maps fused to anatomical with image registration.

IB Diffusion

- IB Diffusion™ is software that analyzes MR diffusion-weighted images (DWI) and generates Apparent Diffusion Coefficient (ADC) maps, extrapolated b-value, IVIM, and other parameters. ADC values have been shown to be useful in the initial diagnosis and treatment monitoring of all solid tumors.
- KEY FEATURES OF IB DIFFUSION™ SOFTWARE
  - b values can be read directly from DICOM image headers
  - The standard two-point ADC calculation (ADC = ln(So/S1)/(b1-b0)) is implemented
  - Extrapolated b-value, IVIM, and stretched exponential parameter generation are available.
  - Linear regression is used to calculate ADC maps with more than two volumes, each with a unique b value

CERCARE MEDICAL

CERCARE Perfusion is grounded in more than 20 years of research inperfusion imaging and is powered by artificial intelligence.

Efficient workflow. Efficient care. Built to save time.

Time and efficiency matter – to you and to patients. Cercare Perfusion is built to let you practice accurately and fast. Automatic postprocessing allows you to be confident in the maps you assess while acting with speed. It's efficient care – without compromises.

Easy to use. Easy to integrate. Built to make your life easier.

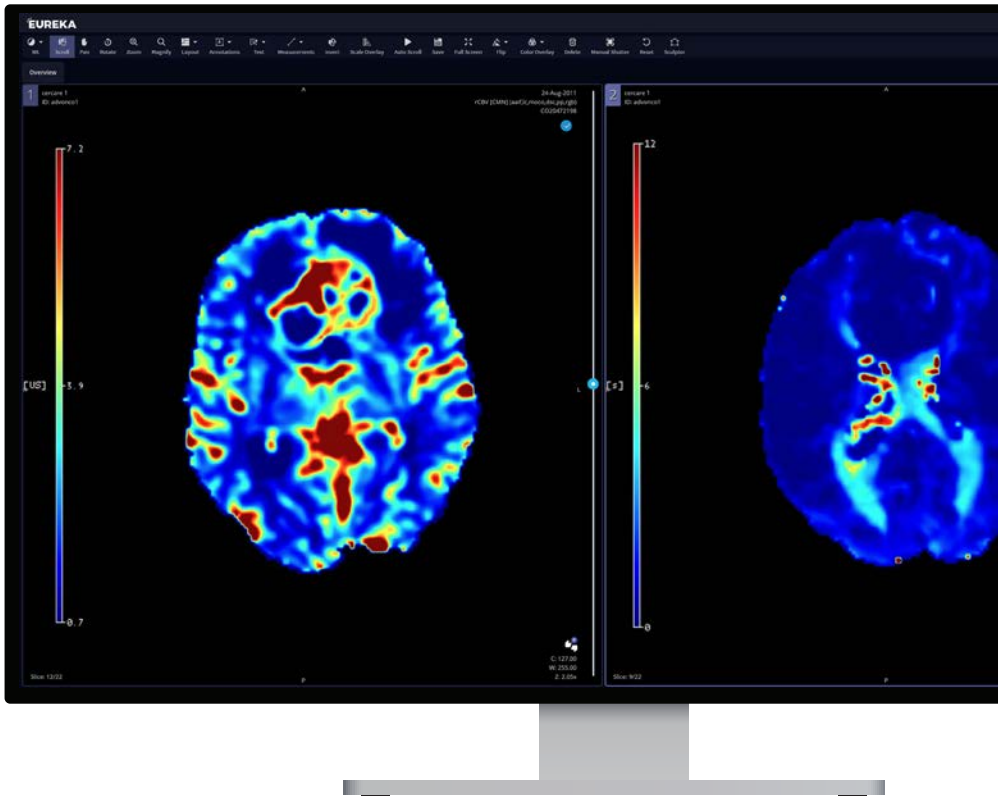
Cercare Perfusion software package for CT and MRI is compatible with most major scanner and PACS providers. With its standard imaging outputs and zero-click postprocessing, Cercare Perfusion is easy to integrate and easy to use for everyone, providing what you need, when you need it. Nothing more, nothing less.

Deeper Insights. Consistent results. Built for confident assessments.

Cercare Perfusion provides high-quality parametric maps reflecting brain tissue microvascular integrity and function. No matter the circumstances we give you deeper and consistent insights needed to make confident assessments of brain CT and MRI.

Unique insights into brain tissue oxygenation

Our technology accounts for capillary flow generating reliable parametric maps that do not only reflect the cerebral blood flow and the cerebral blood volume but provide additional information on brain tissue oxygenation with unique perfusion maps that have already proved to provide invaluable insights for the assessment of neurological disorders.



Cercare's solution packages:

Neuro Basic:

- Basic Perfusion (DSC) and Diffusion
- Perfusion maps computation with SVD algorithm + DWI outputs computation
- Automated series identification
- Automated co-registration
- Motion correction

Neuro Advanced (OUS):

- Advanced Perfusion (DSC) and Diffusion
- Perfusion maps computation with Vascular Model + DWI outputs computation
- Leakage correction
- Parametric mapping of MR T1 perfusion
- Automated series identification
- Automated co-registration
- Motion correction

Neuro Advanced (US):

- Advanced Perfusion (DSC) and Diffusion
- Perfusion maps computation with Vascular Model
- Leakage correction
- Automated series identification
- Automated co-registration
- Motion correction
- Neuro Basic+Advanced:
- A combination of both the Neuro Basic and Neuro Advanced features

Stroke Basic:

- Basic Perfusion (DSC) and Diffusion + Virtual Basic modules
- Core and hypoperfused volumes and mismatch with Tmax and ADC threshold
- This module allows Core and Hypoperfused volumes and mismatch computation using a thresholding method with Tmax and ADC threshold

Stroke Advanced:

- Advanced Perfusion (DSC) and Diffusion + Virtual Expert Advanced modules
- Core and hypoperfused volumes and mismatch with AI method (no threshold)
- This module allows Core and Hypoperfused volumes and mismatch computation using a multi-image-marker AI new proprietary method (no threshold)

Stroke Basic+Advanced:

- A combination of both the Stroke Basic and Stroke Advanced features

Your expertise, combined with our technology, can redefine the future of neurology. Experience the potential of AI-powered neuroimaging today. Don't wait - request a demo of our Neuro Suite now. Witness first-hand how it can revolutionize your practice, enhance your diagnostic capabilities, and ultimately, transform patient care.

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