

inspired by a better way



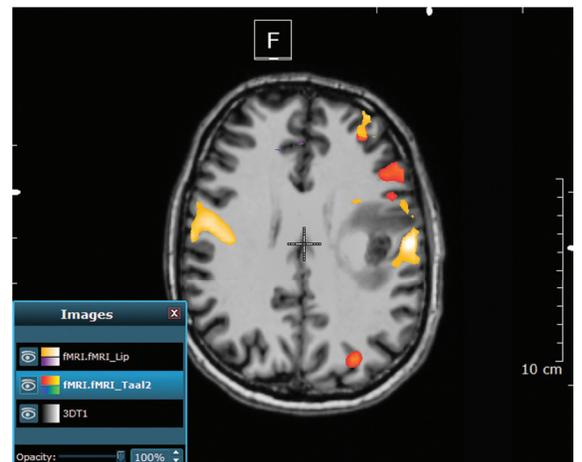
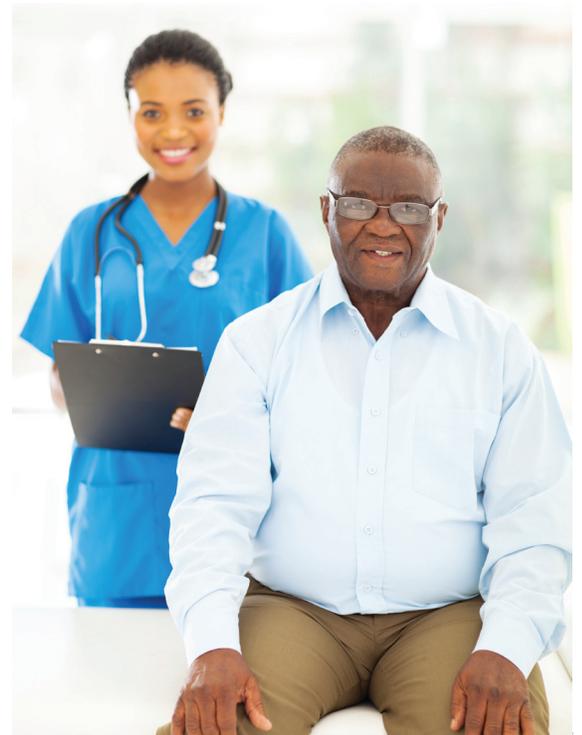
+ Clinically focused workflow with unique ability to integrate fMRI, DTI, fiber tracks and perfusion in a single, multi-layered 3D rendering

Neurosurgeons are demanding more from neuroradiologists and increasingly relying on functional studies to augment their procedures.

In vivo is leading the way with DynaSuite Neuro, providing analysis of MRI studies for perfusion, diffusion, functional imaging and volumetrics. These applications are integrated and automated in a single, easy-to-use package designed for the radiologist.

DynaSuite Neuro quickly processes these advanced applications in the background and presents results in a "ready-to-interpret" form in customizable, preconfigured formats. A vessel feature is used to identify and visualize the vascular structures of the brain. A unique user interface uses layers to allow clinicians to simultaneously view anatomical images and results, such as DTI fiber tracks, fMRI activations, perfusion color maps, and vessels in a single 2D and 3D display. Results can be exported directly to the major neurosurgical planning systems on the market.

In addition, DynaSuite Neuro is available in a client-server configuration, allowing access to study analysis wherever you need it.



Ability to fuse fMRI layers to anatomical layers.



fMRI Review

DynaSuite Neuro Features:

- Functional MRI (fMRI) for surgical planning
- Diffusion tensor imaging for fiber tracking and surgical planning
- Diffusion and perfusion to assess tissue characteristics
- 2D and 3D fusion for surgical planning

fMRI Review

The fMRI Review displays the paradigm time course graph for any selected activation as well as threshold settings for the paradigm for easy adjustment.

Diffusion Tensor Review

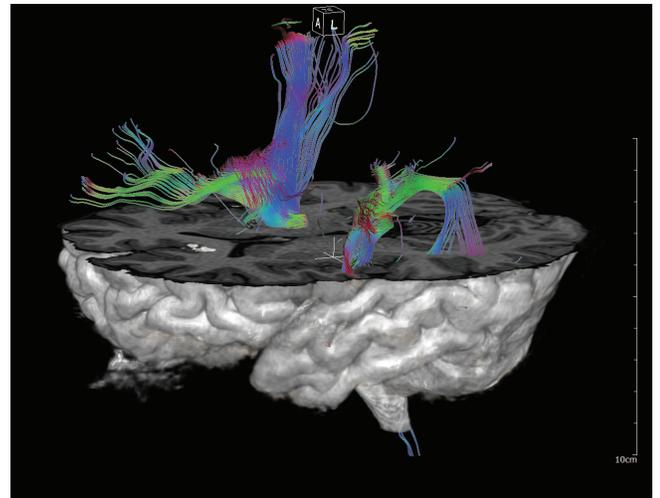
The Diffusion Tensor Review provides FA and ADC maps as well as the directional color map. Users can display fiber tracks using ROIs as seed points.

Dynamic Review / DSC Perfusion

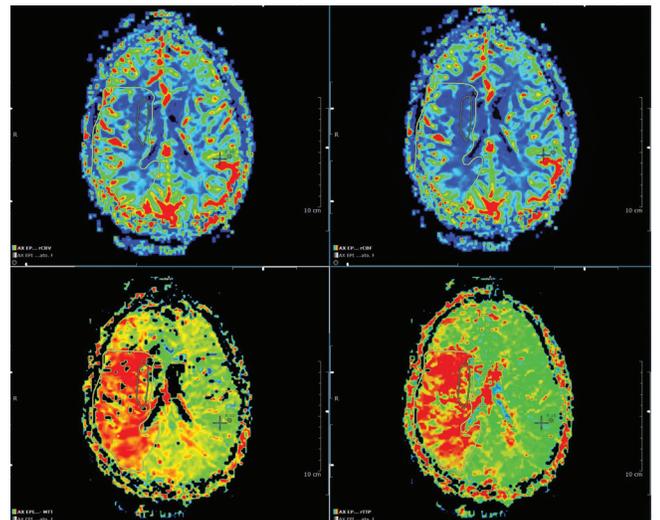
Dynamic Review includes a hanging that displays all four color maps including relative Cerebral Blood Volume (rCBV), relative Cerebral Blood Flow (rCBF), Mean Transit Time (MTT), and relative Time To Peak (rTTP). A second Dynamic Review provides the dynamic susceptibility curve on a voxel-by-voxel and ROI basis. Leakage correction is computed and a unique leakage color map is provided.

Smart Fusion Review

A unique ability to integrate fMRI, DTI fiber tracks, perfusion and vessels in a single, multi-layered 3D rendering makes the Smart Fusion Review screen an excellent option for summarizing findings. The 3D display provides rotation, cut planes, adjustable thresholds and transparency levels. The transparency of the skin layer, vessels and cortex in the 3D rendering can be adjusted independently for visualization and surgical consultation.



Arcuate fasciculus and corticospinal fiber tracks



Dynamic Review with rCBV, rCBF, MTT and TTP

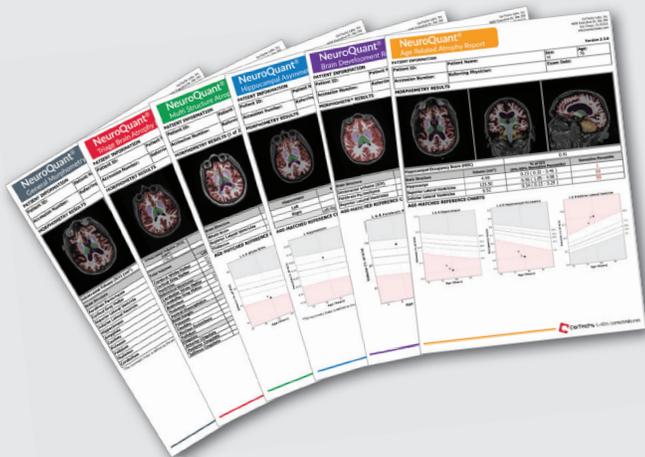
NeuroQuant®

Invivo teamed with CorTechs Labs to provide NeuroQuant volumetric reports. These may be ordered with or without DynaSuite Neuro. NeuroQuant produces fully automated, consistent and reproducible results for an extensive set of segmented subcortical structures.

Multiple volumetric reports are helpful in providing objective evidence of neurodegeneration in the clinical assessment of Alzheimer's disease, epilepsy, multiple sclerosis and brain trauma. An additional report aids in the clinical assessment of brain development.

Quantitative measurements are tracked longitudinally to aid ongoing evaluations.

CorTechs Labs' patented Dynamic Atlas™ technology allows robust, automatic segmentation and volume measurements for patients ranging from ages 3-100 years.



Available Reports:

Age Related Atrophy - objective, quantitative measurements of neurodegeneration of the hippocampus and inferior lateral ventricles can be used in the evaluation of neurodementias such as cognitive impairment and memory loss.

Hippocampal Asymmetry - beneficial in the assessment of temporal lobe epilepsy and unilateral degenerative conditions, providing physicians with objective measurements in cases where there is slight hippocampal or bilateral volume loss.

Multi Structure Atrophy - assess volume measurements in 9 different brain structures during an initial scan and follow up scans to help physicians monitor Multiple Sclerosis, as well as, other neurodegenerative conditions.

Triage Brain Atrophy - in-depth evaluation of 44 regional and global brain structures after a traumatic brain injury or in neurodegenerative disease.

Brain Development - left and right forebrain parenchyma and lateral ventricles. The Brain Development Report helps physicians in their assessment of children ages 3 and up.

General Morphometry - absolute and relative volumes for the left and right hemispheres of 11 brain structures, provides an asymmetry index and includes the ICV.

NeuroQuant and Dynamic Atlas are trademarks of CorTechs Labs, Inc.



Smart fusion hanging

Ease of Use

With the ability to draw regions of interest (ROIs) in any review screen, DynaSuite Neuro allows users added flexibility. Regions of interest can be used for analytical results of the selected display overlay. The preconfigured review hangings simplify analysis and enhance workflow.

Compatibility

DynaSuite Neuro can process images for most major MRI systems from manufacturers such as GE, Philips, Siemens and Toshiba*. The result images can be imported into most major neuro surgical planning systems from manufacturers such as Medtronic and Brainlab*. fMRI activation maps can be calculated from most block-paradigm presentation systems such as those manufactured by Invivo, NordicNeuroLab and Resonance Technology, Inc.*

Quality Checks

DynaSuite Neuro is designed to streamline your workflow through automated processes. Comprehensive quality checks are available to provide you with an extra measure of confidence. These quality control hangings allow you to make a visual inspection of the results and make adjustments to positioning or thresholds.

“Access Anywhere”

DynaSuite Neuro features a client-server architecture that allows you to access the application virtually anywhere. Many customers choose to install the DynaSuite Neuro client on their primary reading stations. Radiologists in the reading room, staff members in the MRI control room and neurosurgeons in the surgical suite can access any study on the system. Results created at each location stay with the study. Existing DynaSuite Neuro customers can easily upgrade to this feature, preserving their investment and expanding their capabilities.

Result Export

DynaSuite Neuro also provides you with the ability to create a “results image series” and a final report. The results images and the report can be sent to your PACS system and automatically combined with the original study data. The results images can also be exported to the major surgical planning systems.

Invivo is leading the way

Invivo provides a software analysis package for perfusion, diffusion, functional imaging and volumetrics enabling neuroradiologists to prepare data for neurosurgeons. These applications are integrated and automated in a single, easy-to-use package. Neuroradiologists can export results to surgical planning systems for use by neurosurgeons.

DynaSuite Neuro from Invivo works in conjunction with SensaVue fMRI to provide a complete solution for fMRI activation and analysis.



SensaVue fMRI Features:

- Mechanical and electrical safety standards for use with MR systems up to 3.0T
- High-resolution 32" display
- Widely-used clinical experiment paradigms
- Button-response units for monitoring participation
- 2 auxiliary A / V inputs
- Video/Audio entertainment options

For more information about DynaCAD Breast or any of the Clinical Solution products from Invivo, please call us at 1-800-INVIVO1, or visit our website at www.invivocorp.com



www.invivocorp.com

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