

PHILIPS

Oncology solutions

Advanced neuro



Advanced neuro processing
a complete solution



Partnering to build integrated oncology programs

Philips recognizes that oncology care requires integrated approaches across patient pathways. From diagnosis and staging, to treatment decision, to therapy planning and follow-up, Philips is addressing challenges in cancer care by providing solutions across the entire care delivery pathway.

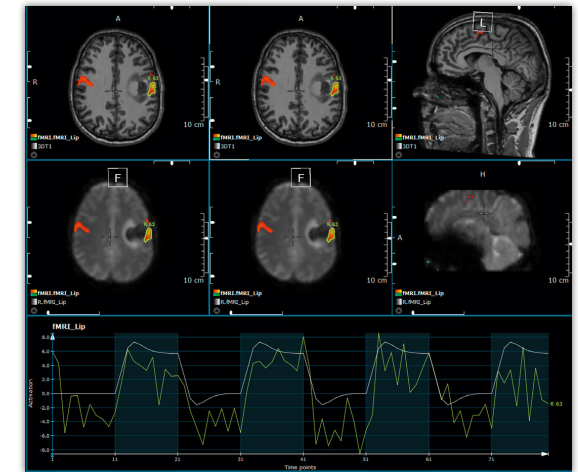
Philips is relentless in its pursuit to help you build integrated oncology programs in the ever-changing healthcare landscape.

Because today, health knows no bounds and neither should healthcare.

Streamlined workflow

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

Philips is leading the way with DynaSuite Neuro, a software solution with a clinically focused workflow and a unique ability to perform automated processing of data acquired from multiple MRI vendors. Helping to aid in clinical decision making for disorders of the brain from diagnosis to treatment to surgical planning, DynaSuite Neuro processes fMRI, DTI, fiber tracks, and perfusion color maps into a single, multi-layered 3D rendering in real time. DynaSuite Neuro offers an intuitive interface that allows for customized image visualization as well as DICOM export capability in one, easy-to-use package designed for radiologists.



fMRI Review Hangings are equipped with tools for analyzing BOLD epi sequence responses.



2D and 3D fused images combine anatomical structural data with fMRI and fiber track overlays.

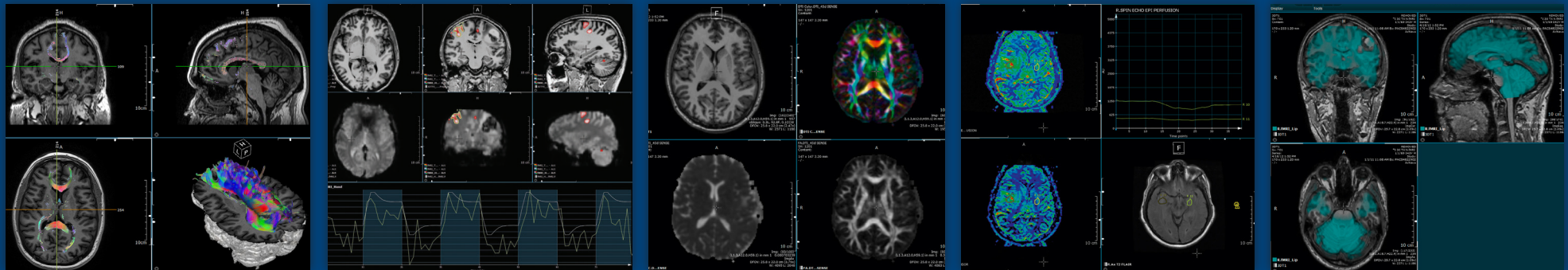
Enhance productivity with advanced visualization

DynaSuite Neuro quickly processes advanced neuro applications and presents results in preconfigured formats that are “ready-to-interpret.” With a unique user interface, the application uses layers to allow clinicians to view anatomical images simultaneously in multiple planes fused with fMRI activations, DTI fiber tracks, perfusion color maps or cortical surface vessel maps along with many additional, flexible options.

Results can be exported directly to most commercial neurosurgical planning systems.

DynaSuite Neuro is available in a client-server configuration to allow access virtually anywhere for added flexibility.

Automated processing features



Smart fusion review

The smart fusion review feature summarizes findings with multi-layered 2D or 3D renderings of anatomical or processed data results. Users can review external landmarks or select skull stripping to unveil a vessel map or any other underlay. The 3D display provides rotations, cut planes, and adjustable thresholds that offer distinct clinical insights.

fMRI review

The fMRI review feature displays results from BOLD epi sequences over high resolution anatomical images. Block paradigm fMRI activation maps can be calculated for ROI voxel statistics or be plotted with time course graphs. A motion check feature offers insights into paradigm integrity. Threshold and opacity overlay settings can be adjusted as needed.

Diffusion review

The diffusion review feature provides parallel displays of processed results for both high b-value diffusion and diffusion tensor data. ROIs defined from ADC or FA maps can be applied to neurofiber color maps for fiber tracking and for a variety of clinical conditions and treatments.

Dynamic review

The dynamic review feature allows users to simultaneously view color flow maps illustrating rCBV, rCBF, MTT, rTTP, and permeability leakage maps. Users can also view a real-time susceptibility curve on a voxel-by-voxel basis or over a ROI for statistical analysis.

Quality checks

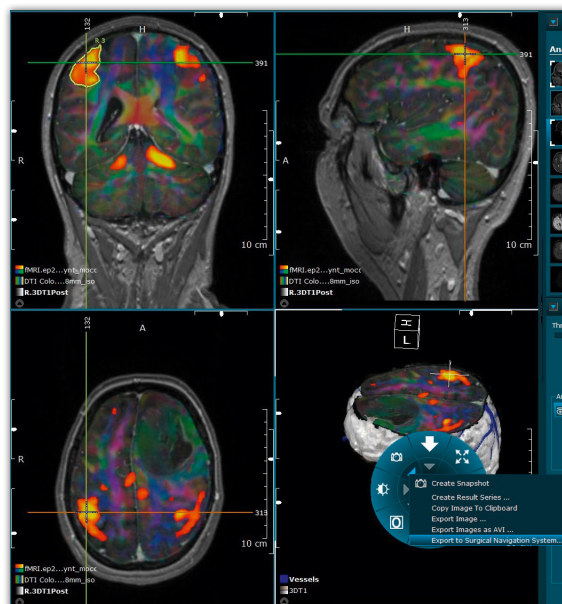
Comprehensive quality checks for each application provide an extra measure of confidence. Quality control hangings make it easy to visually check the alignment and co-registration of result data. Users can adjust settings and saved changes can be applied to final computations.

Ease of use

DynaSuite Neuro streamlines study assessment with its preconfigured review hangings and comes equipped with applicable images and tools. Users can define regions of interest from any review screen and apply them to selected overlays to provide analytical results.

Export results to DICOM

DynaSuite Neuro also provides you with the ability to create a “results image series” and a final report. Operators can archive user-created result images and final reports to their PACS system to be combined and stored with original study data. Image series created by DynaSuite can be exported to compatible surgical planning and navigation systems via network connection or to an external device.



Smart review hanging with single-click, multi-layer export to surgical navigation systems.



Vendor neutral connectivity

DynaSuite Neuro can import and automatically process datasets from multiple MRI manufacturers. Derived result data can be exported into a number of neurosurgical navigation systems for surgical assistance.

The complete solution

DynaSuite Neuro from Philips works in conjunction with SensaVue fMRI to provide a complete solution for fMRI activation and analysis. SensaVue is an MRI-safe audio and visual display for entertainment and fMRI paradigm delivery.

A comprehensive, easy-to-use display for clinical procedures, SensaVue offers benefits for both the patient and the clinician. With several media entertainment options available, SensaVue can help create a positive MRI experience for the patient.



SensaVue mobile cart

Flexible design

SensaVue sends visual and auditory signals from a variety of media sources to a high-resolution 32" display. The display is mounted on a movable cart with a swinging arm that articulates up to 42" horizontally and 12" vertically. Its flexible design allows clinicians to place the mobile stand virtually anywhere in the MRI suite and is compatible with systems up to 3.0 Tesla.

Options that fit to your needs

Not limited to entertainment, SensaVue also has the ability to deliver pre-configured or custom-designed paradigms for neurological exams that provide proven activation of the motor, visual, auditory and language regions of the brain. Button response devices included with the fMRI package capture real-time patient reactions. Custom research paradigms can also be projected through the system or users have the options to create their own custom block paradigms using Paradigm Studio*.

Interference-free communication between the operator and the patient is available with SensaVue's pneumatic headphones with an integrated microphone. The operator console has intuitive controls for adjusting the volume and display. Prism glasses and corrective lenses included with purchase further enhance viewing capabilities. An optional rear-facing mirror* for use with head coils is also available.

*sold separately

HD entertainment

SensaVue HD includes the necessary control room and magnet room display hardware to accommodate a variety of media entertainment options for patients during routine clinical MRI exams. Providing a sensory experience for patients, SensaVue can help ease the potential stress brought on by in-bore exams.

The system media library may be loaded with a variety of playback media types, including movies, music and slideshows, all of which can be seen on the in-room display and heard through the audio headset or MR system audio. In addition to SensaVue's built-in audio and video library, patients can also bring their own media for playback during the exam.



Setup	
Session	
Paradigm	➔
Parameters	
Instructions	
Trigger	

Select a paradigm:
ButtonPressStaticList1
Visual
VisualMotor
FingerTapping
LipMovement
PassiveAuditory1920x1080
FeetMovement
SentenceCompletion
VerbGeneration
WordGeneration
ObjectNaming

Ten clinically validated fMRI paradigms are pre-loaded with the system and are set to synchronize with the MRI scanning protocol.



SensaVue control room console

Intuitive controls

SensaVue accepts signals from up to three digital or auxiliary input sources, providing the technologist with full sensory control. The operator may individually adjust media displays and speaker volumes for an optimal experience.



DynaSuite Neuro is Manufactured by MeVis Medical Solutions AG

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