Neuro suite

Neuro decisions are based on what you see, so see more.
Defining the future
of Image Guided Therapy

Innovative solutions across the health continuum
At Philips, we’re here to support you in providing optimal care to your patients. Across the health continuum, we cover the full range of consumer and patient needs, from living healthily, to being diagnosed and treated for an illness, to recovery or chronic care at home. We look across the health continuum because when it comes to health, it’s the only way you can see.

The areas of diagnosis and treatment are the focus of Philips Image Guided Therapy. They account for 70% of all healthcare costs, and this landscape is rapidly evolving. The expansion of interventional procedures and the development of new technologies continue to open up new possibilities and applications. This in turn opens the way for more targeted diagnosis and new, more complex treatment options.

Clinical demands are getting more specific. So are we.
During an interventional procedure you are focused on making the best decisions you can for each patient. Each patient and each disease has very specific challenges, complexities, and needs. As the number of procedures and patients goes up, you can see the need for better forms of image guidance and interventional devices for effective treatment and decision making. At the same time, optimized workflows are key to improving efficiency. That’s why we created clinical suites: a flexible portfolio of integrated technologies, devices and services for a broad range of interventional procedures.

Each of our clinical suites offers specific image guided therapy solutions to provide more choice and flexibility for exceptional care. So you can be confident in your performance and in the fact your patients are receiving exceptional care. Together we aim to create the future of image guided therapy.

Coronary suite
Transforming complex PCI procedures into confident care

EP suite
Seamless integration drives EP excellence

SHD suite
From planning to live guidance for SHD procedures

Vascular suite
Redefine the outcome for vascular treatment

Neuro suite
Neuro decisions are based on what you see, so see more

Onco suite
Critical insights for superior care in Interventional Oncology

Spine suite
Perform spine surgery with confidence and precision

Healthy living > Prevention > Diagnosis > Treatment > Home care
Neuro suite

Neuro decisions are based on what you see, so see more

The field of neuro intervention is changing rapidly as more diseases are treated with less invasive techniques. New devices offer new treatments, but smaller and less radio opaque devices also present new challenges when it comes to placement and treatment assessment.

Time is a critical aspect of clinical outcome in acute ischemic stroke treatment. To reduce the door-to-reperfusion time for these patients, we see the need for rapid triage and CT-like imaging in the interventional suite. In elective neuro interventions, such as cerebral aneurysm treatment, new, more complex devices become available. For this, quality imaging in 2D and 3D is essential for accurate treatment planning, device navigation, and assessment of device placement. During complex AVM procedures, real-time guidance is invaluable for developing the correct treatment plan and mitigating risk during the procedure.

Enter our Neuro suite. Based upon the Azurion platform, it’s superior imaging puts you in firm control whether you’re treating an acute stroke patient, visualizing the smallest intracranial vessels, precisely placing a flow diverter, or working slowly through a complex AVM. You can work with the confidence that comes from using sophisticated imaging technologies and neuro options that are the result of intensive research with clinical leaders and industry pioneers in neuro interventions.

Our Neuro suite with Azurion can simplify your workflow can help shorten procedure time, and manage radiation dose, and that means everything when your patients’ care.

Key benefits
- Supports high-precision diagnosis and treatment of ischemic stroke in the same room
- Enhances workflow and patient handling to promote efficiency and consistency
- Displays vessel anatomy and device apposition to the lumen in never-before-seen detail
- Elevates treatment confidence with dynamic live image guidance through complex vascular lesions
The stroke landscape has changed dramatically in recent years based in part on the many studies that have shown the efficacy of thrombectomy in combination with iv-tPA as a first line treatment for ischemic stroke. The number of comprehensive stroke centers is rising rapidly, driven by better clinical outcomes and the logistical benefits compared to primary stroke centers. We are also seeing a shift from time-based to image-based patient selection for ischemic stroke treatment. As diagnostic imaging in the interventional suite becomes more sophisticated, we see opportunities for image-based patient selection to dramatically shorten stroke workflows.

Our Neuro suite has been developed to address these trends. It provides workflow options, dedicated interventional neuro tools, and neuro accessories to support high levels of procedural efficiency and redefine outcomes for your stroke patients. The Azurion system supports each step of your procedure – as you decide, guide, treat, and confirm treatment results.

### Acute Ischemic Stroke

The need of rapid triage and intervention

"Delays in the workflow cause onset-to-reperfusion times of multiple hours. Long imaging-to-groin puncture times contribute significantly to the total delay."

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<tr>
<th>Last known Normal To Reperfusion (min)</th>
<th>Arrival to Initial CT</th>
<th>Initial CT to Stroke Center Notif</th>
<th>Stroke Center Notif to Ambulance Arrival</th>
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Outside Hospital Transfers

Local Emergency Department

### Instant Parallel Working

Allows team members to work on different tasks at the same time without interrupting each other to shorten procedure times for critical stroke patients.

### Workflow options that can help you optimize lab performance

12% reduction in in-lab preparation time supported by ProcedureCards

- **FlexVision Pro**
  - Gives you instant access and full control of pre-operative diagnostic scans, patient information, planning tools at table side
  - Allows table side control of images and applications with tablet ease to save time and unnecessary walking in and out of the sterile area

- **ProcedureCards**
  - Streamline and standardize system setup and reduce preparation errors in acute ischemic stroke procedures
  - Hospital specific stroke protocols and/or checklists can be added

- **Touch screen module Pro**
  - Allows table side control of images and applications with tablet ease to save time and unnecessary walking in and out of the sterile area

Azurion offers a number of workflow innovations designed to help on-call staff work efficiently and easily, while maintaining a single-minded focus on the patient during acute ischemic stroke interventions.

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**Be ready to take on new challenges in ischemic stroke treatment**

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**Outside Hospital Transfers**

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Comprehensive diagnostic and treatment support for ischemic stroke patients

Decide

Identify if the patient has an ischemic or hemorrhagic stroke. Localize the affected area and assess the state of the penumbra and amount of salvageable tissue.

Guide and Treat

Decide if the patient has an ischemic or hemorrhagic stroke. Locate the affected area and assess the state of the penumbra and amount of salvageable tissue.

Guide and Treat

XperCT Dual View to see collateral filling by viewing early and late phase XperCT Dual volumes side by side. This enhances identification of penumbra and enables visualization of collateral filling.

Guide and Treat

VasoCT to check location and length of a clot. VasoCT allows visualization beyond the clot by retrograde filling of overlapping vessels. Before and after the clot are shown. This enables visualization of collateral filling and support of vascular devices during stroke procedures.

Guide and Treat

Maintain sharp images using 2D DSA with ClarityIQ technology. Automatic Motion Compensation during real-time DSA, to maintain sharp images of the vessel to support confident decision making throughout stroke procedures.

Guide and Treat

Gain anatomical references with 3D-RA and 3D Roadmap. The 3D Roadmap provides additional references to support the navigation of guidewire, catheter, and device to the clot.

Guide and Treat

Enhance visualization of vasculature with Roadmap Pro. This advanced roadmap helps to enhance visualization of overlapping vessels by double contrast roadmap. This supports confident decision making throughout stroke procedures.

Confirm

After treatment, there is a need to confirm if all clot material has been removed. To check for bleedings, XperCT Dual can be used.

Confirm

Gain anatomical references with 3D-RA and 3D Roadmap. The 3D Roadmap provides additional references to support the navigation of guidewire, catheter, and device to the clot.

Confirm

Peri-procedure check of bleedings with XperCT Dual. This can be used to check treatment success and bleedings.

Confirm

Confidence in treatment success with DSA run-off. By quality DSA visualization, you can assess if you have removed all clot material and check per-procedure bleedings.

Confirm

Gain anatomical references with 3D-RA and 3D Roadmap. The 3D Roadmap provides additional references to support the navigation of guidewire, catheter, and device to the clot.
Flow diverter (FD) stenting has become an established technique for treating cerebral aneurysms. New techniques and devices inspired by the flow diversion principle are being used more often, and new coil technologies are increasingly taking ground over traditional coiling. For bifurcation aneurysms, intrasaccular embolization devices are becoming mainstream. Visualizing these new, less opaque devices present new challenges during treatment planning and device placement. In this dynamic area, superb 2D and 3D imaging is crucial to guide treatment decisions and device placement, while managing radiation dose efficiently.

Neuro suite provides workflow options, dedicated neuro interventional tools, and neuro accessories to improve procedural accuracy and reduce radiation exposure for staff and patients during aneurysm interventions. They support each step of your procedure – as you decide, guide, treat, and confirm treatment results.

Our Neuro suite with Azurion offers a number of workflow innovations designed to simplify your workflow, shorten procedure time, and manage radiation dose during aneurysm interventions.

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See clearly and navigate effectively when treating cerebral aneurysms.

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Innovative neuro interventional workflow

**Decide**

**Guide**

**Treat**

**Confirm**
Clinical solutions that support efficient decision making and treatment of cerebral aneurysms

Decide
- Obtain insight in the vasculature and visualize the location, size and neck of the aneurysm to optimize treatment planning.

Guide
- New technologies and devices make it more challenging than ever to efficiently navigate to the feeding vessel and accurately position devices - all while avoiding arterial dissection and spasm and managing contrast agent and radiation use.

Treat
- Support precise guidance of devices with MR-CT Roadmap.
- Visualize blood flow patterns with Aneurysm Flow.
- Enhance visualization of contrast in the angiogram with Roadmap Pro.
- Post-treatment flow calculations with AneurysmFlow.

Confirm
- Confirm proper treatment and device placement and deployment in the context of the feeding vessel, neck, and aneurysm.
- Peri-procedure check of bleedings with XperCT Dual.
- Enabling imaging of events and devices in the brain with XperCT Dual, a visualization technique that combines a high resolution XperCT with contrast injection to provide a detailed view of aneurysms, devices and vessel morphology down to the level of perforating vessels and for follow-up of aneurysms treated with flow diverters or stents.
Create your perfect Neuro suite

Our image-guided therapy Neuro suite is the result of our ongoing investment in neurovascular imaging technology and our partnerships with clinical leaders and industry pioneers on research and clinical studies to support more informed decision making for neurovascular interventions. Neuro suite is a combination of the Azurion platform, interventional solutions, workflow options, accessories, education, and services. We also offer room solutions and support to create a leading-edge Hybrid OR. Since all solutions are integrated, you have the flexibility to configure a treatment environment that matches your clinical challenges and requirements.

Azurion – one platform, an endless array of clinical possibilities

Based on the three principles of superior care, lab performance, and unique user experience, Azurion helps to provide a consistent standardization of care. Backed by our clinical suites, it’s an invaluable platform to improve workflows and provide new treatment options.

What makes Azurion so unique?

With its wide range of intervention tools, Azurion is designed to help you perform procedures more efficiently and consistently with fewer complications. It also offers greater user customization and control over every aspect of interventions.

2 The impressive results achieved in this first Azurion lab performance study have been verified by an independent third party. Results are specific to the institution where they were obtained and may not reflect the results achievable at other institutions.