The Neuro AI platform is a vendor neutral comprehensive suite of clinically useful AI neuroimaging applications that provide physicians with fully automated, and easy to-interpretable customizable reporting -- facilitating fast and accurate diagnostic and treatment decisions for stroke, neurodegenerative disease, multiple sclerosis and brain tumor patients.
Benefits

Fast Diagnostic and Treatment Decisions

The Neuro AI platform analyzes NCCT, CTA, CTP and MRI diffusion and perfusion data facilitating more accurate diagnostic and treatment decisions and helping reduce delays in identifying and acting on abnormal brain medical images where time is critical.

Consistent Results

The Neuro AI platform delivers automated brain imaging analysis -- providing physicians with standardized results for assessing stroke, neurodegenerative, multiple sclerosis and brain tumors -- minimizing variability associated with individual interpretation -- facilitating more consistent and accurate diagnoses.

Increase productivity and decrease reporting time

The Neuro AI platform provides physicians with fast access to automated and quantitative brain imaging analysis, measurements and customizable reporting that reduces tedious manual tasks and increases productivity.

Optimized Workflow

The Neuro AI platform does not require on-premises hardware and results are accessible from anywhere and any device through a single user-interface zero footprint viewer and an internet connection. It seamlessly integrates with Powerscribe or Fluency dictation software ensuring exams are read accordingly and consistently.
Solutions & Features

**Stroke Suite**

**AI solution for neurovascular emergencies**

Time is the brain when it comes to detecting stroke. Using a combination of deep learning and machine learning technologies with robust validation processes to match real life expectations, the Stroke suite detects and prioritizes acute LVO and ICH cases, analyzes CT and MR perfusion and notifies the radiologist and the care team within their existing systems and workflow.

- AI triggered alerts to stroke team and hospital network based on automated detection of suspected LVO and ICH findings
- Anywhere access to critical patient information to quickly align on patient care with real-time notifications - reducing time to treatment and facilitating better patient outcomes
- NTAP reimbursement available for AI powered triage and notification for patients with suspect of LVO stroke
- CT perfusion reporting of core volume and perfusion lesion by quantifying CBF, volume, transit time, mismatch ratio, AIF/VOF graphs and perfusion maps
- MR perfusion reporting with automated volume of DWI, hypoperfusion volume and mismatch ratio between diffusion and perfusion
Neurodegenerative disease

Automated brain volumetry and comparison

MRI brain imaging is a critical tool in assessing patients with neurodegenerative diseases. Automated brain volumetry is a powerful tool to overcome subjective visual assessment of subtle changes in brain atrophy and to identify patterns associated with different types of dementia. The AI based segmentation provides an accurate and consistent quantitative evaluation of MRI brain scans and the automated report allows comparison over time.

Multiple sclerosis

Segmentation and quantification of FLAIR lesions is crucial for the evaluation of multiple sclerosis to deliver an efficient, objective assessment of disease activity and determine the best course of treatment. AI-driven segmentation, detection and tracking of white matter lesions on FLAIR MRI allows to accurately visualize lesions and lesion volume change over time and data-driven lesion tracking improves your reporting experience.
Oncology

All the tools you need to diagnose and follow up brain tumors

The neuro oncology suite provides you with the tools to non-invasively distinguish tumor from pseudo-progression with >95% accuracy. IB Neuro offers the most robust algorithm to post-process your DSC perfusion MRI. IB DeltaT1 allows rapid and objective identification of TRUE enhancing regions in pre and post-contrast T1 MRI. IB Diffusion calculates (ADC) maps, and other diffusion parameters and IB DCE for Automated generation of perfusion parameter maps (Ktrans, Vp) all with zero clicks.

4D Flow

Visualize and quantify flow precisely in the intracranial vessels

Leverage Arterys 4DFlow post-processing to visualize and quantify flow measurements in the carotids and large brain vessels, demonstrate early hemodynamic changes in arteriovenous malformation and study blood flow in aneurysms and stenosis or in pediatric patients.

*4DFlow for intracranial vessels is used for Research use only in US*
## The Arterys Platform Benefits

<table>
<thead>
<tr>
<th>Cloud-based supercomputing</th>
<th>Zero Footprint Diagnostic web viewer</th>
<th>AI augmentation, interaction</th>
<th>Clinical workflow integration</th>
<th>Secure and Resilient</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Blazing fast processing of imaging data with Multi GPU based rendering</td>
<td>✓ Access images and tools anywhere</td>
<td>✓ More consistent, accurate diagnostics</td>
<td>✓ Speed diagnosis with automated reporting</td>
<td>✓ GDPR, HIPAA, SOC2 ISO 27001, Information Security Certified</td>
</tr>
<tr>
<td>✓ No heavy IT infrastructure required on-prem!</td>
<td>✓ All you need is internet</td>
<td>✓ Eliminates tedious and error-prone manual tasks</td>
<td>✓ Improve physician collaboration across geography</td>
<td>✓ World class security comes standard, with ISO-27001, SOC-2 and HIPAA requirements for data security.</td>
</tr>
<tr>
<td>✓ Elastic scalability means you never have to worry about performance</td>
<td>✓ Easily share cases and workspaces</td>
<td>✓ CE marked &amp; FDA cleared algorithms</td>
<td>✓ Inject results and image/video into your reports.</td>
<td>✓ Constant monitoring of adverse events maximize uptime, impact.</td>
</tr>
<tr>
<td>✓ Low maintenance, always up-to-date, no-cost automatic continual updates</td>
<td>✓ FDA and CE Cleared</td>
<td>✓ Data-driven decisions</td>
<td>✓ Study in-context URL launching with single sign-on means Arterys automatically moves with your workflow</td>
<td>✓ Real-time interactive support is also available through in-app chat feature</td>
</tr>
<tr>
<td>✓ Fully interactive real-time visualization of DICOM images</td>
<td>✓ Web-based zero footprint viewer with full-screen mode</td>
<td>✓ Vendor neutral AI, easily integrate any algorithm into clinical workflow</td>
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<td>✓ Access images and tools anywhere</td>
<td>✓ Mac, PC, tablet and phone</td>
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## System Requirements

Arterys is completely hosted in the cloud using Amazon Web Services (AWS) servers in several regions accessible globally through a Microsoft Edge or Google Chrome web browser by navigating to https://app.arterys.com

**Internet Speed**

3 Mbps up/down Internet connection with a maximum of 100 ms latency.

**Website Access**

WebGL is enabled on the device used to access the Arterys website. WebSocket is not blocked. *Consistent experience across Mac, PC and mobile devices.*

Zero foot-print viewer no software installation required.

**Browser**

Google Chrome Web Browser version 82 or above. *Microsoft Edge Web Browser version 80 or above.*

**Edge Service**

Custom software installed on a server within the hospital network or in the cloud to automate the sending of DICOM objects from the scanner to the cloud and to PACS while ensuring that the patient’s protected health information (PHI) remains within the hospital network (refer to Edge Data Sheet).