

GE Healthcare

Synergize Modalities

AW VolumeShare™



New Level of Inte



grated Imaging

The new AW VolumeShare™ multi-modality platform takes image visualization and analysis to a new level of understanding and efficiency.

Advanced capabilities of AW VolumeShare offer a compelling option for Advantage Workstation from GE Healthcare, and are designed to address your toughest clinical challenges. The software's computational power represents a technological innovation that overcomes traditional processing limitations to seamlessly integrate imaging across modalities and care areas – expanding your reach and increasing your speed.

With revolutionary workflow enhancements to minimize clicks and save time for review, AW VolumeShare organizes tasks and tools in a manner that corresponds directly to the ways in which physicians work, making processing virtually second nature.



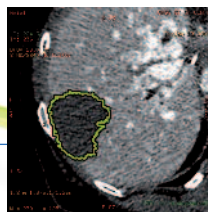
Powerful Simplici

The enhancements to AW VolumeShare directly address workflow optimization to satisfy your constantly evolving requirements. Powerful capabilities are built into a simplified framework that helps you do your job faster and better.

AW VolumeShare integrates with your RIS/PACS environment, enabling quick access to the information and tools you need to leverage your diagnostic expertise. As you review, you can automatically retrieve archived exams and load them as needed to diagnose quickly across multiple time points and modalities.

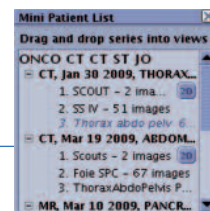
AW VolumeShare also supports one-click access to applications, and application presets through one-touch protocols.

The core AW multimodality 3D software platform, Volume Viewer, now provides a more flexible compare mode, advanced MR and interventional review layouts, and faster segmentation capabilities. You can also save your 3D review to your AW or PACS to resume later – such as once you receive a follow-up exam.



■ Auto-Contour

is a simple yet powerful tool to contour and measure suspicious structures. Volume and diameter percentage growth can then easily be monitored.



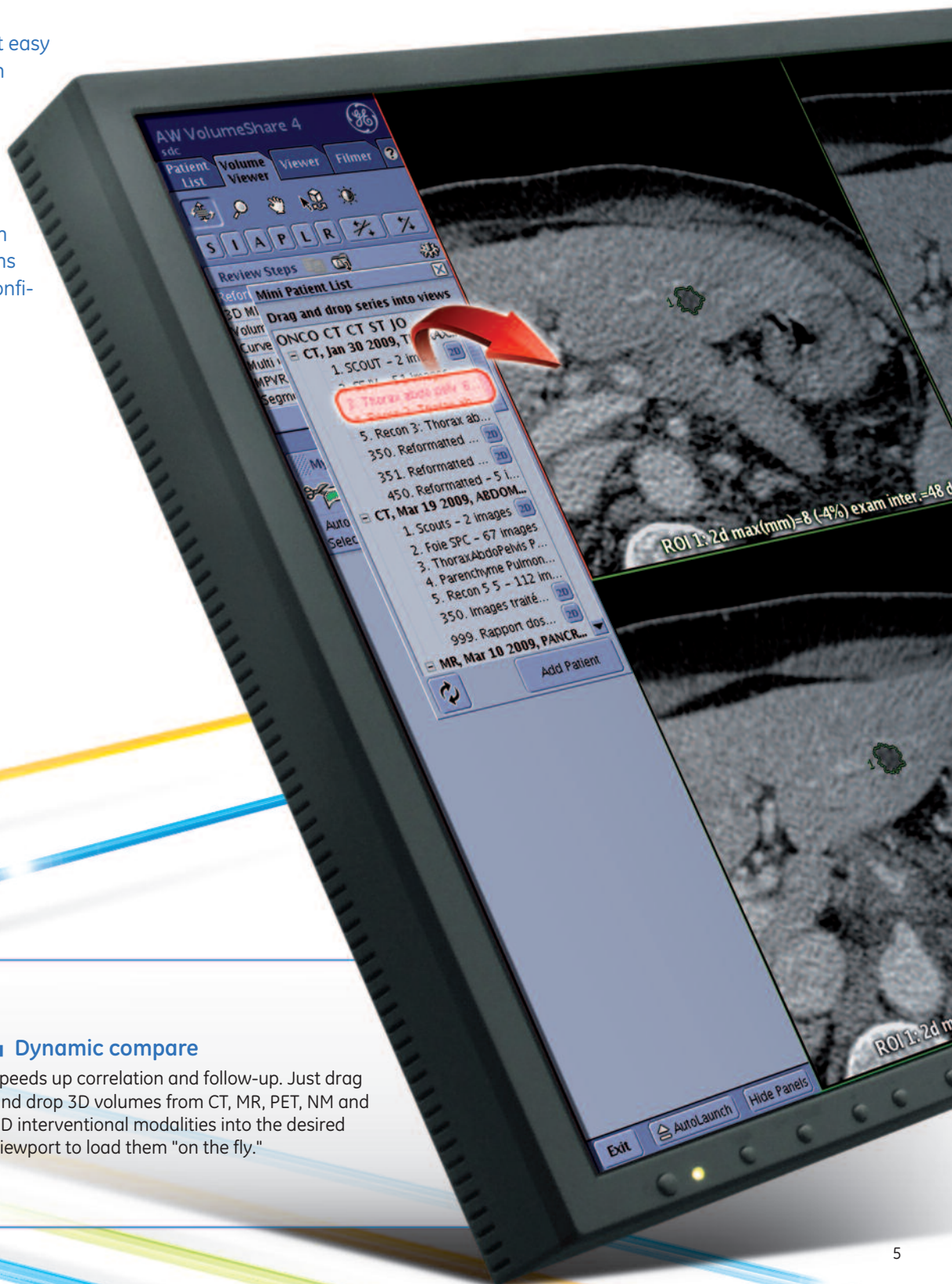
■ Postfetch

automatically retrieves prior exams as soon as they arrive on the workstation, putting the entire patient history in front of you.

RIS / PACS

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AW VolumeShare makes it easy for you to collaborate with other physicians by marking key images and sending them to multiple destinations with one click. In addition, the output generated from Volume Viewer applications is automatically sent to configured hosts.



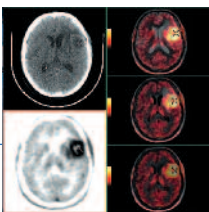
■ Dynamic compare

speeds up correlation and follow-up. Just drag and drop 3D volumes from CT, MR, PET, NM and 3D interventional modalities into the desired viewport to load them "on the fly."

With AW VolumeShare, the combination of two or more imaging modalities really is greater than the sum of their individual effects. Now, you can synergize modalities at maximum speed.

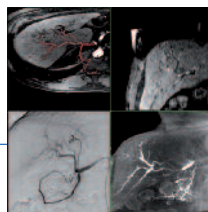
The integrated registration of AW VolumeShare provides easy comparison of CT, MR, PET, SPECT and interventional 3D images with simplicity at its core. Achieve registration and fusion between volumetric acquisitions from either the same or different modalities, using dedicated protocols or by doing a simple “drag-and-drop” within the core 3D Volume Viewer platform.

Enlightening Integration



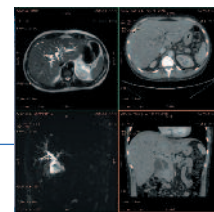
■ Automatic propagation

means quick registration across all series acquired in the same patient exam, as well as to any image from loaded exams.



■ Multi-Registration

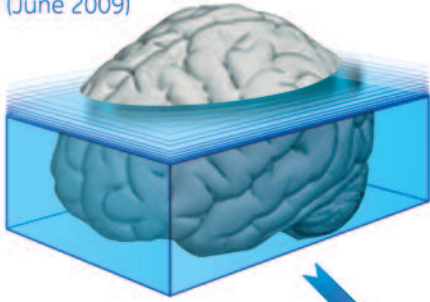
offers compatibility of the four different registration methods: automatic, regional, manual and landmark. All can be combined to achieve an optimal result.



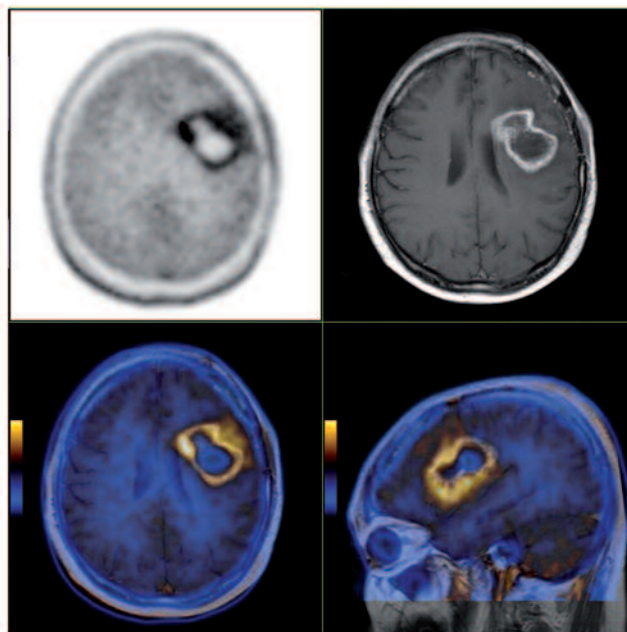
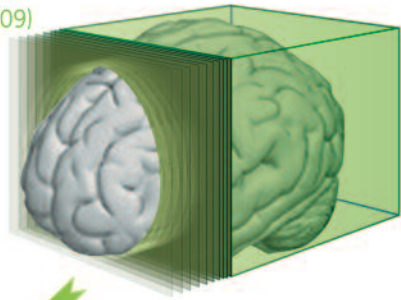
■ Integrated Registration

can now be part of your standard workflow. Inside an opened 3D session, additional exams can be easily registered as you work, through a simple “drag and drop.”

PET exam
(June 2009)



MR exam
(October 2009)



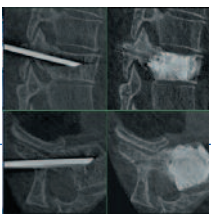
Interventional Vis

With the ability to integrate 3D images from the Innova™ interventional imaging system from GE – as well as CT, MRI and PET datasets – AW VolumeShare is a powerful tool for interventional navigation, providing a level of unprecedented convenience for the interventional radiologist.

This advanced integration enables the use of multimodality patient image information for real-time planning and navigation during interventional therapies. Processing, integration and image overlay can all happen at a single workstation with one convenient user interface.

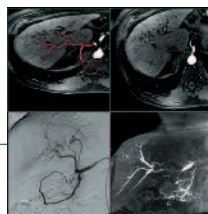
With more information available about the anatomy of the treatment area, you can more quickly devise a strategy to treat disease while minimizing the impact on surrounding tissue. AW VolumeShare lets you use multi-modality images to help steer the interventional gantry. The pre or intra-procedure 3D anatomy can help guide the gantry to the optimal position for securing the best real-time image.

More information can also lead to better planning, shortening a procedure's time. This directly impacts care access, as more efficient procedures can help increase the number of possible procedures per day.



■ Integrated Registration

Capabilities make it practical to overlay and match existing 3D images from different modalities, providing complementary information to plan and guide interventional procedures.



■ Dynamic Compare

Enables "before" and "after" comparisons, i.e., comparing an X-ray image with anatomy, or comparing the uptake of a radioactive PET tracer with blood flow in a region.

ualization

■ 3D Mouse

Allows multi-modality gantry navigation from the control room or tableside, using integrated multi-modality images.

Streamlined Wor

At the heart of your radiology department, AW ensures a streamlined post-processing workflow from acquisition to communication with a minimum number of clicks. Ensuring an optimal user experience, and a true time gain to leverage your reading expertise and communicate it broadly.

With AW, GE pioneered a user interface that enables intuitive pre- and post-processing for enhanced productivity and efficiency. This powerful innovation enables you to quickly answer advanced clinical challenges. This has introduced flexibility to clinical practice that directly impacts reading time and patient care.

■ One-Touch

Automated selection of the appropriate protocol for each anatomy and indication speeds workflow and simplifies post-processing tasks.

kflow

Conventional workstation

From acquisition to diagnostic in 5 minutes



AW VolumeShare

8 exams ready to read



■ Multi-Session

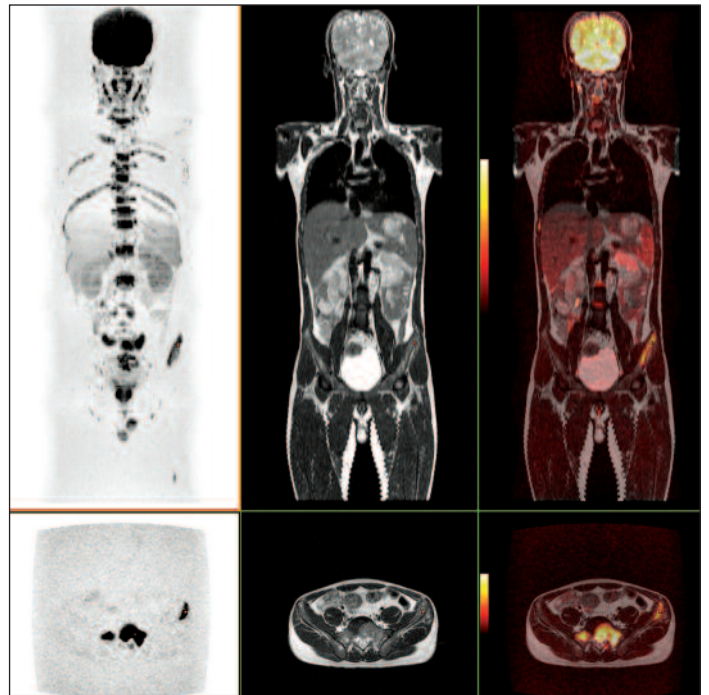
Switch smoothly between different patient exams, allowing you to perform secondary reviews or discuss a case with a referring physician – without having to quit your current session to load and process another case.

■ Autolaunch & Preprocessing

Exams are automatically loaded and processed as soon as they are transferred, even as you are reading other exams. Up to eight processed exams are accessible instantly, with no waiting time for image loading and processing.

Oncology

A confirmed diagnosis is only the first step in a cancer patient's difficult journey. Cancer's many forms, the breadth of data and the unlimited variables for each individual make it challenging to synergize all of the available information to determine the best course of therapy. AW VolumeShare provides clinical answers to oncology challenges through a wide portfolio of clinical applications covering every step of the oncology paradigm from predicting, diagnosing, planning and guiding intervention to treatment follow-up.



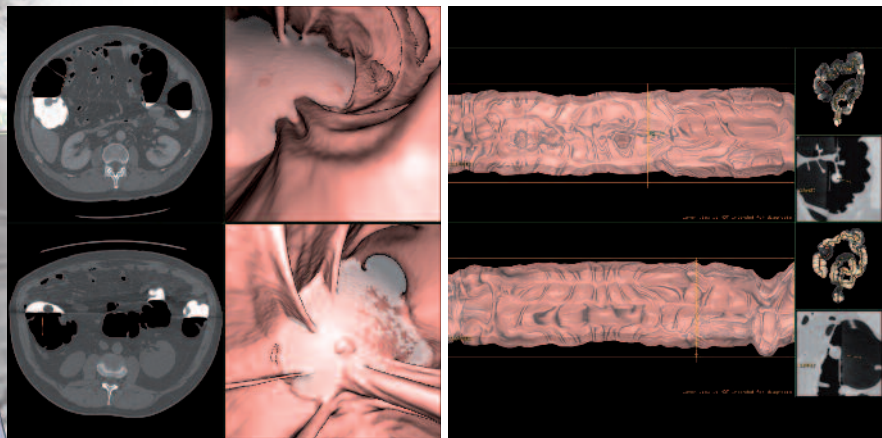
Integrated Registration provides easy comparison of 3D anatomical images from CT, MRI, PET, SPECT and Interventional. It allows automatic registration and fusion between two volumetric acquisitions, which come from either the same or from different acquisition modalities.



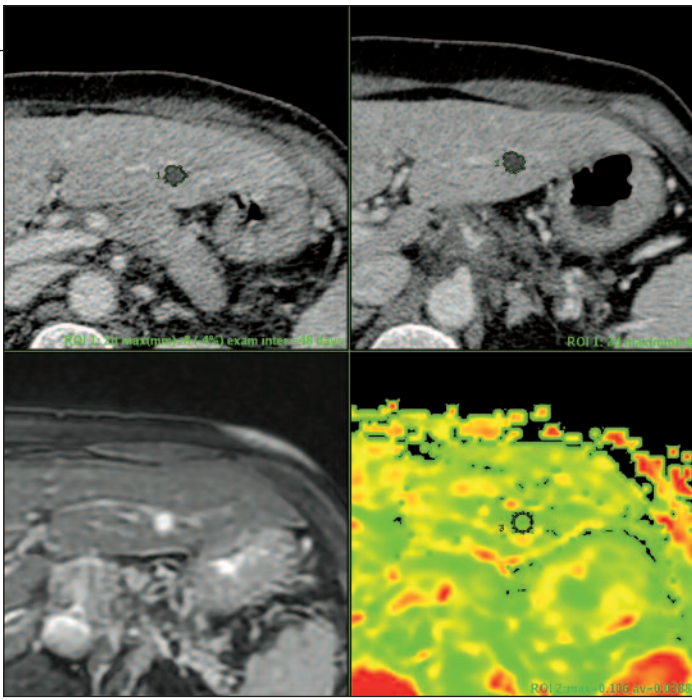
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Images updated and relevant tools automatically implemented

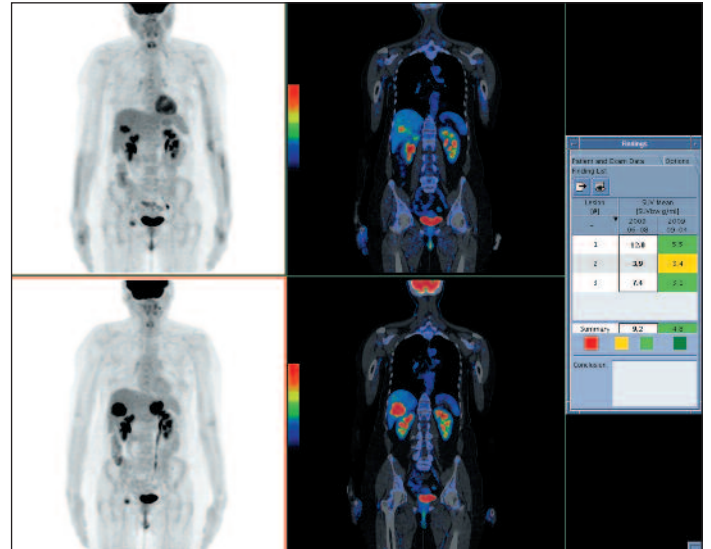
MyTools palette groups all the tools you need for each clinical application



Colon VCAR is a complete reading workflow solution for the detection of colonic lesions. The software has been optimized for quick assessment of the entire internal and external colon using correlated 2D, 3D or a 360-degree dissection views.

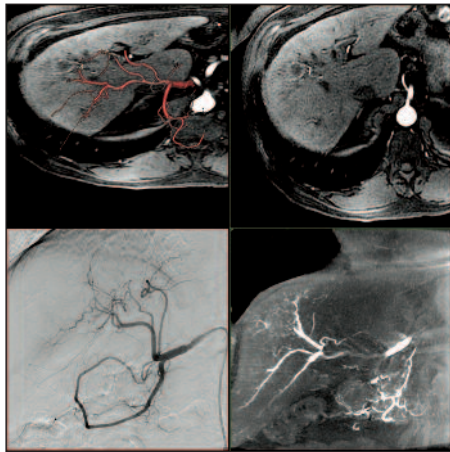


Volume Viewer is the environment of choice for 3D Processing of any CT, MR, 3D X-ray, PET and PET/CT dataset. It provides exceptional tools for analysis, segmentation, measurements, annotation, filming and exporting of clinically relevant images.

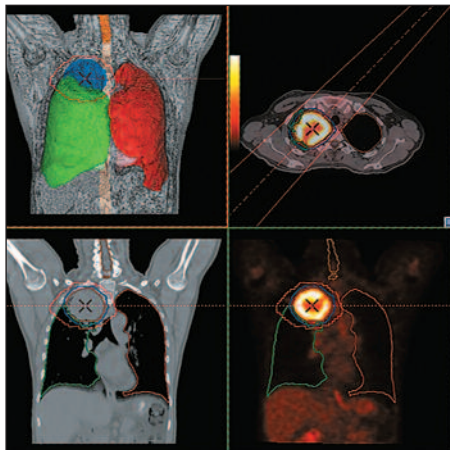


PET VCAR is optimized for analytical monitoring of disease progression, or tumor response to therapy. It provides automated and interactive access to valuable quantitative information, and manages multiple lesions and multiple patient exams over time.

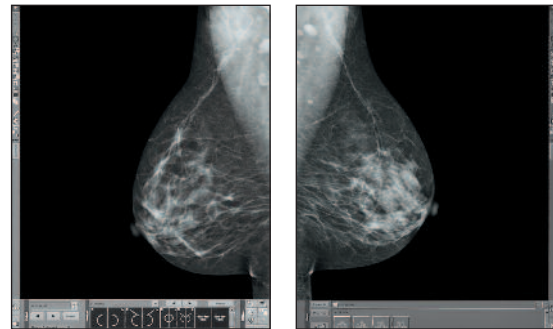
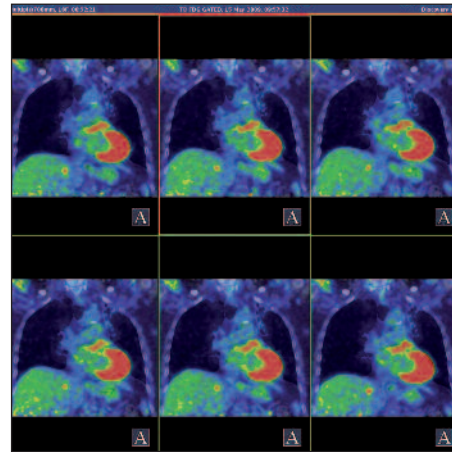
Volume Viewer merges together clinical information from several modalities to provide a complete set of images enabling precise guidance during intervention.



AdvantageSim MD provides automated volume definition and geometric beam placement information for radiotherapy.



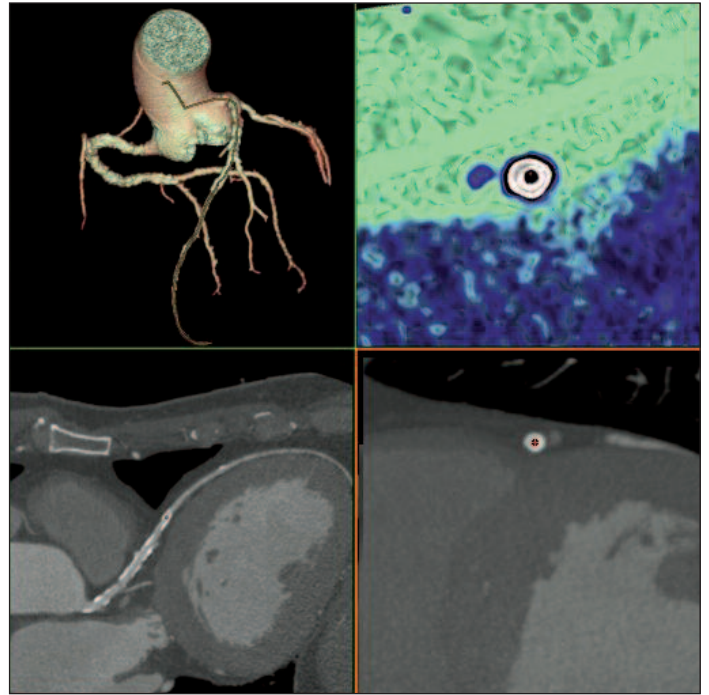
Motion VUE improves your reading of MotionFree PET/CT studies by offering an easy, intuitive and streamlined workflow to control PET and CT image registration.



Enhanced diagnostic confidence plus optimal productivity - the Seno Advantage 2.2 Review Workstation delivers the best of both. It builds on the swiftness, power, and functionality of AW platform, for fast interactive access and streamlined workflow. Access to optional advanced applications, such as FuncTool or Volume Viewer, or CAD, combined with the ability to display and print multi-modality DICOM images - from our system or from any system - allows for great flexibility and productivity.

Cardiology

Heart diseases are a significant health concern today, and progress in cardiac imaging has encouraged development of new tools to promote efficient diagnosis and intervention. AW VolumeShare improves efficiency by streamlining post-processing and synergizing available imaging. This translates to better diagnostic confidence. Whether in the physician's office, the ER or the clinical area, AW VolumeShare offers outstanding cardiology imaging solutions with a single user interface.



CardIQ Xpress enables comprehensive qualitative and quantitative assessment of the heart and coronaries. It features 0-click segmentation and tracking of the entire coronary tree.



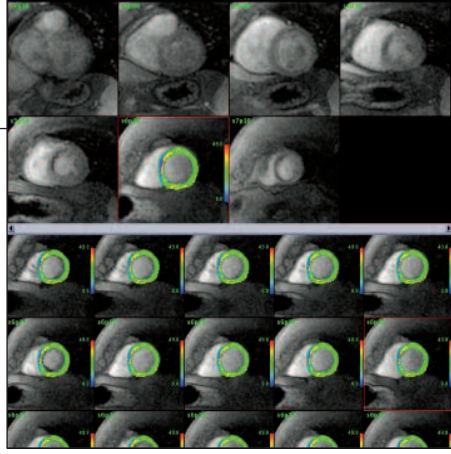
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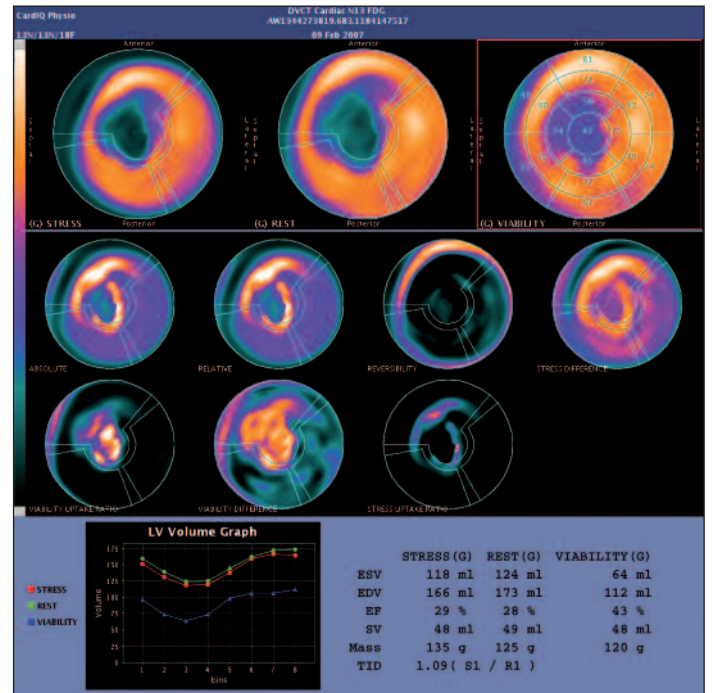
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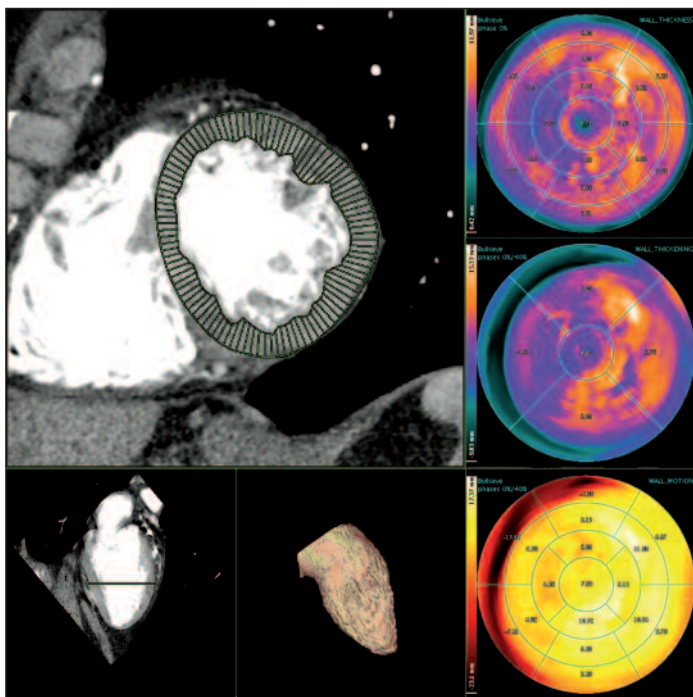
CardIQ Fusion blends PET or SPECT functional information and CT anatomical data. It enables analysis of the functional impact of coronary artery stenosis.



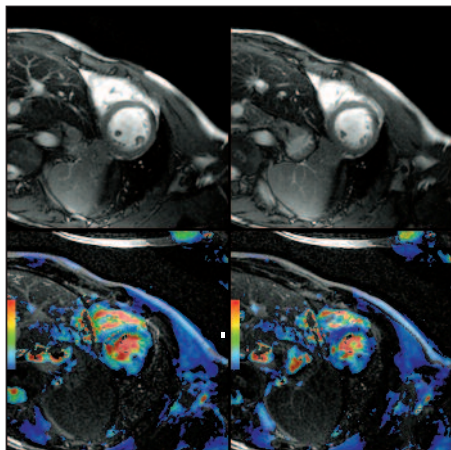
ReportCard improves the quality and consistency of cardiac MR review, analysis and reporting while increasing ease of use. It comes with a comprehensive set of visualization and processing tools: multiphase / multislice review, endocardium / epicardium edge contouring, bull's eye, perfusion analysis with motion correction.



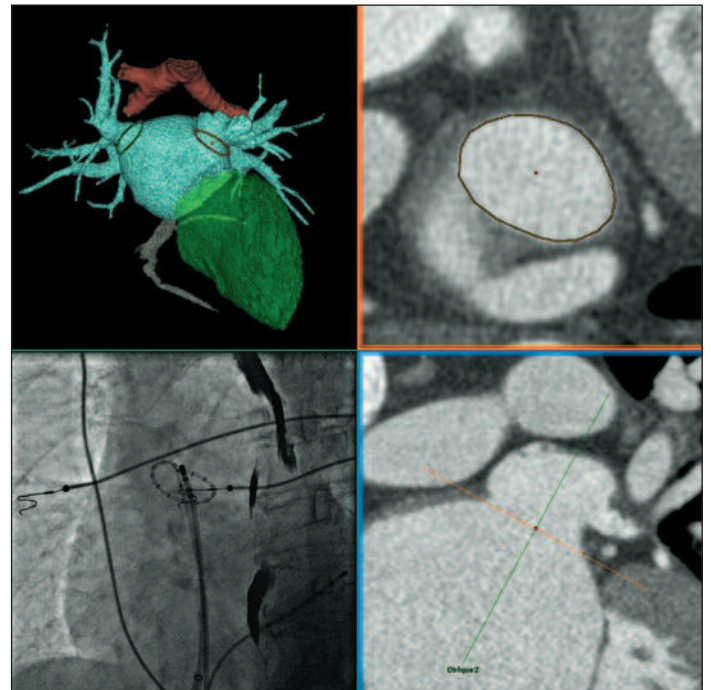
CardIQ Physio for PET automates processing, visualization, and quantification of myocardial perfusion and function. It provides an easy-to-use and efficient tool aiding clinicians to perform cardiovascular imaging.



CardIQ Function Xpress performs 0-click segmentation of the four cardiac cavities and myocardium across cardiac phases for quick and reproducible functional assessment of the heart.



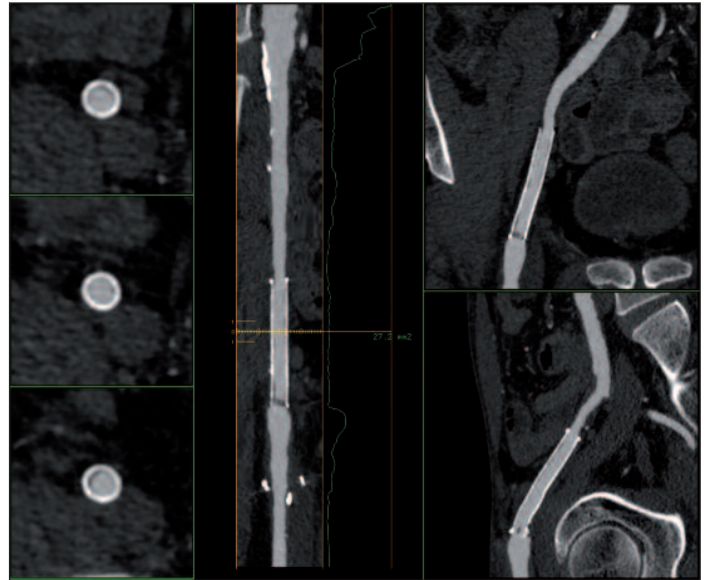
Volume Viewer MR is the environment of choice for 3D processing of MR datasets. It features a cardiac viewer and customizable layout capabilities.



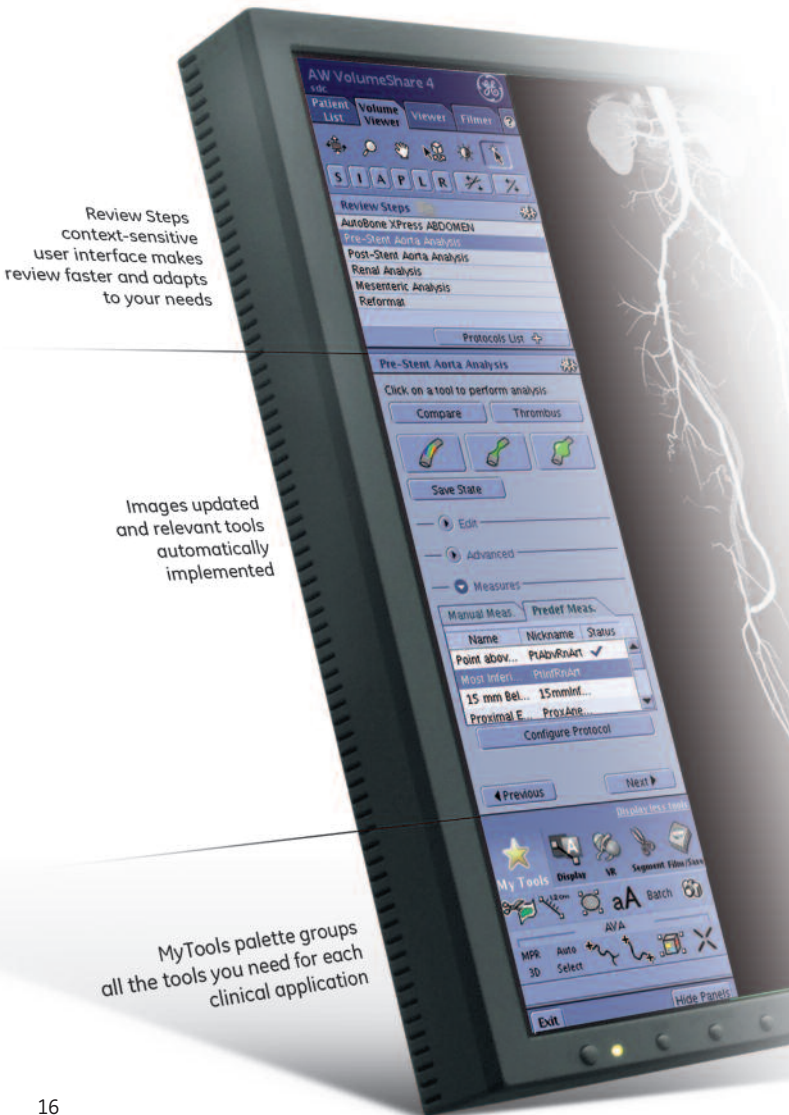
CardEP can be used for the analysis of CT angiographic images for the assessment of the heart to include the atria, pulmonary veins, and coronary sinus. It provides quantitative analysis tools which include a number of display, measurement and model export capabilities. This product can be used to aid trained physicians in the visualization and assessment of cardiac anatomy.

Vascular

Vascular diseases are a leading cause of mortality worldwide. With advanced vascular imaging, radiologists are using a reproducible, reliable, non-invasive technique that provides maximum clinical information. AW VolumeShare streamlines post-processing and synergizes diagnostic and interventional imaging. For the physician's office, diagnostic department or emergency care area, AW VolumeShare offers robust software with a single user interface.

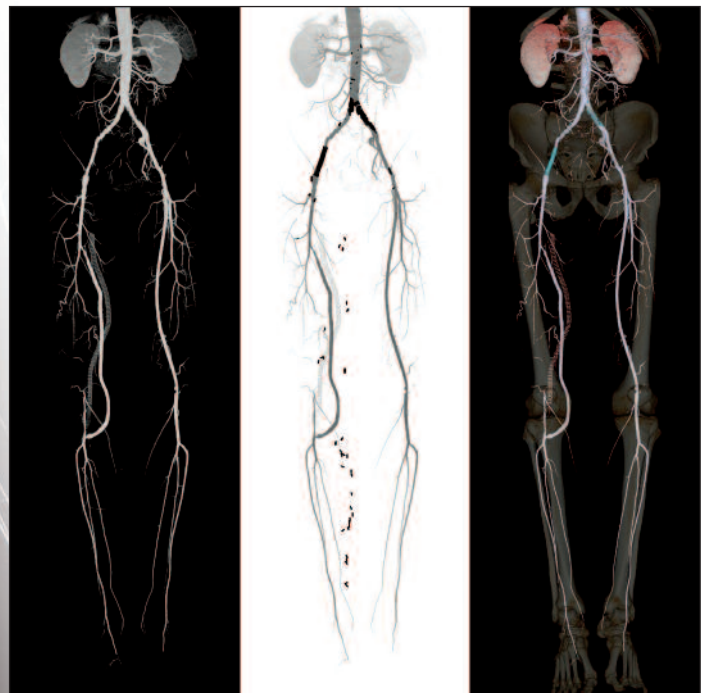


VessellQ Xpress CT facilitate vessel analysis by fast multibranch tracking and automated stenosis measurement. It also features an automated aorta and iliacs tracking and thrombus segmentation and analysis tool.

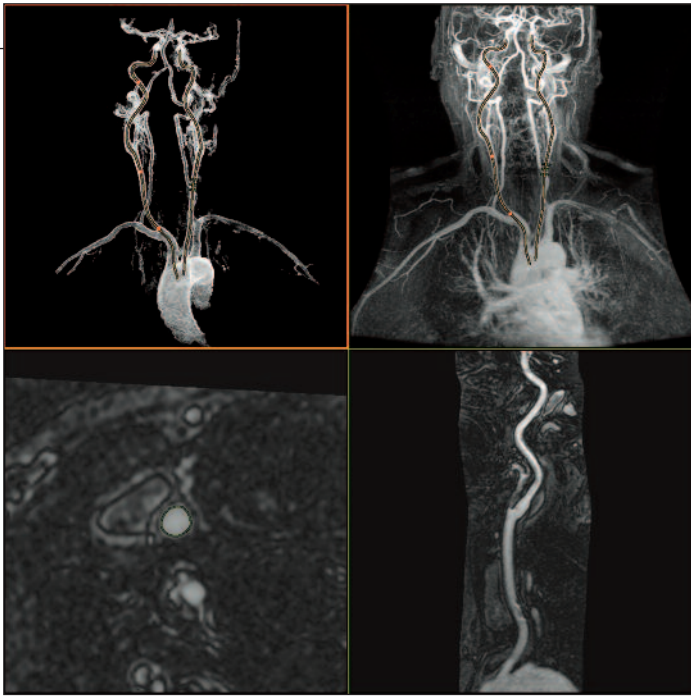


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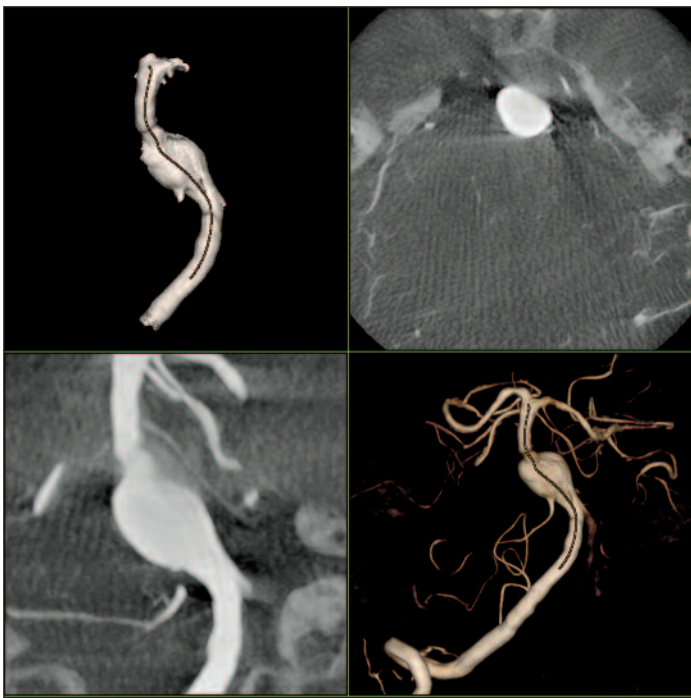
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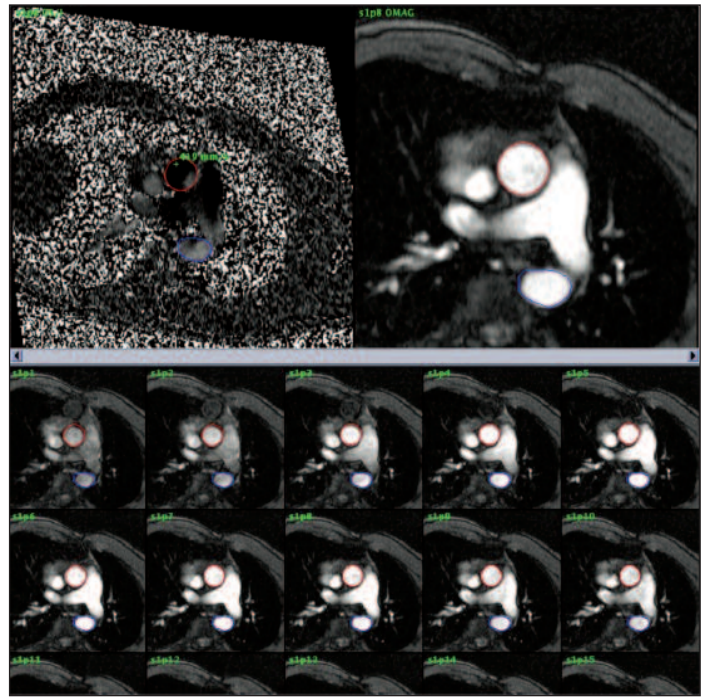
Autobone Xpress removes in 0-click the bone structures for all anatomies. It also features a one-click calcification removal for aorta and lower limbs, thus enabling accurate lumen assessment in calcified regions.



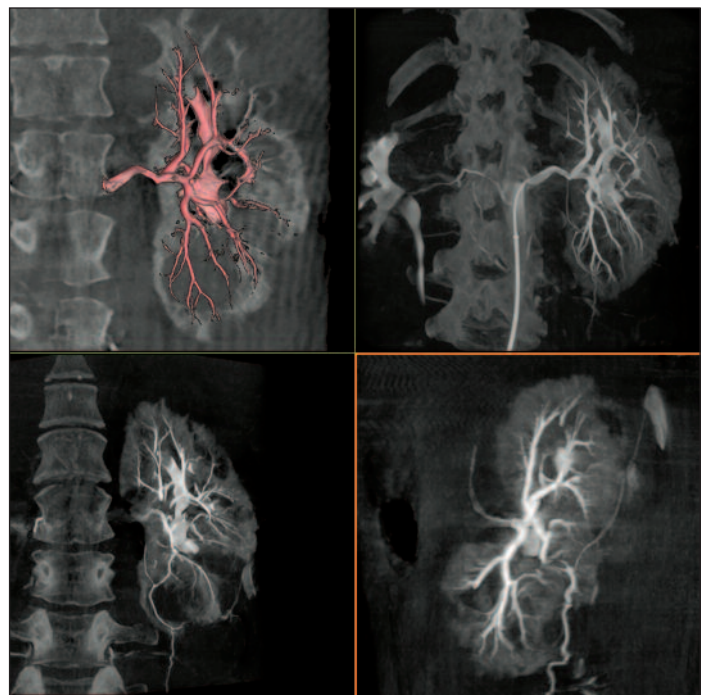
VesselIQ Xpress MR provides the ability to interact with MRA data set, track the centerline of any vessel, and perform multiple measurements to aid in angiographic disease detection and diagnosis, quantify vascular structure and its evolution.



Vessel Tracking on Innova 3D Volumes enables fast tracking of the vessels centerline and display of lumen, curved, and Xsection views. These views are optimal for visualization of plaque and for measurement of vessel length and diameter.



ReportCard Flow allows calculation of peak and average velocity from flow-sensitive CINE Phase Contrast and Fast CINE-PC MR acquisitions.



Innova 3D reconstructs the Innova3D and InnovaCT 2D sequences into an Innova 3D or Innova CT 3D model. The 3D model is saved as a DICOM object for easy export.

Neurology

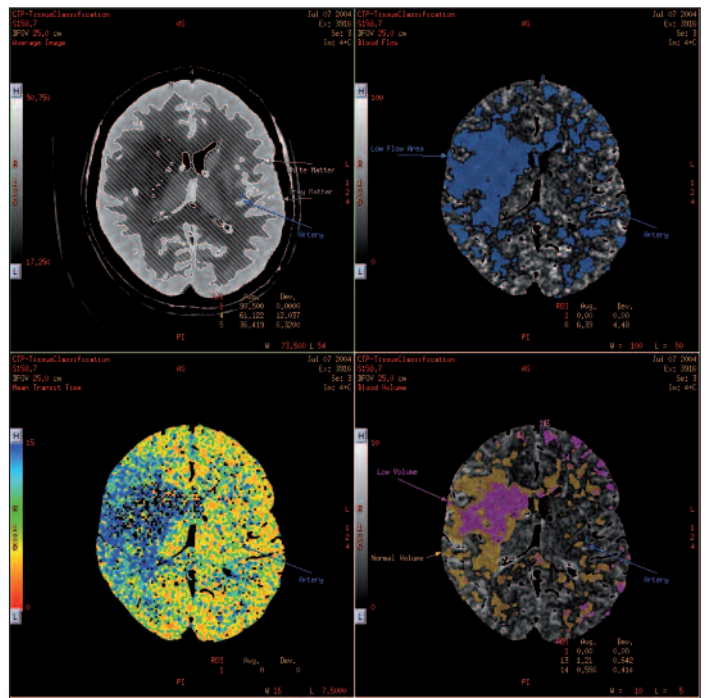
In emergency medicine, neuro-imaging is a key management tool for assessing acutely ill patients. Imaging protocols need to deliver speed, accuracy and simplicity for the fastest evaluation. In addition, neurological conditions can pose complex diagnostic challenges: Clinicians must frequently rule out organic disease, perform a differential diagnosis, and assess the degree of progression at the earliest stages. The suite of neuro-radiology applications from AW provides exquisite anatomical imaging to highlight abnormality; tools that align, combine and display morphological and functional data from multiple sources to enhance diagnostic confidence; and applications enabling accurate and objective quantification of disease progression or severity.



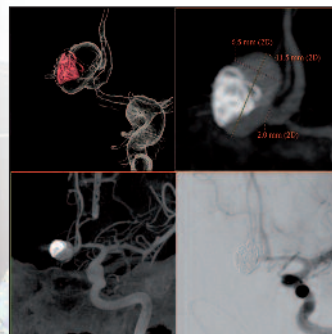
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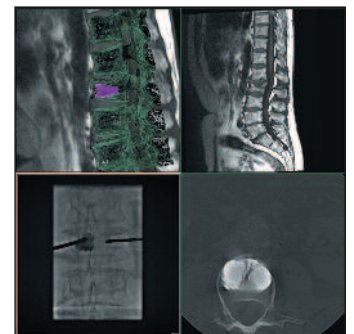
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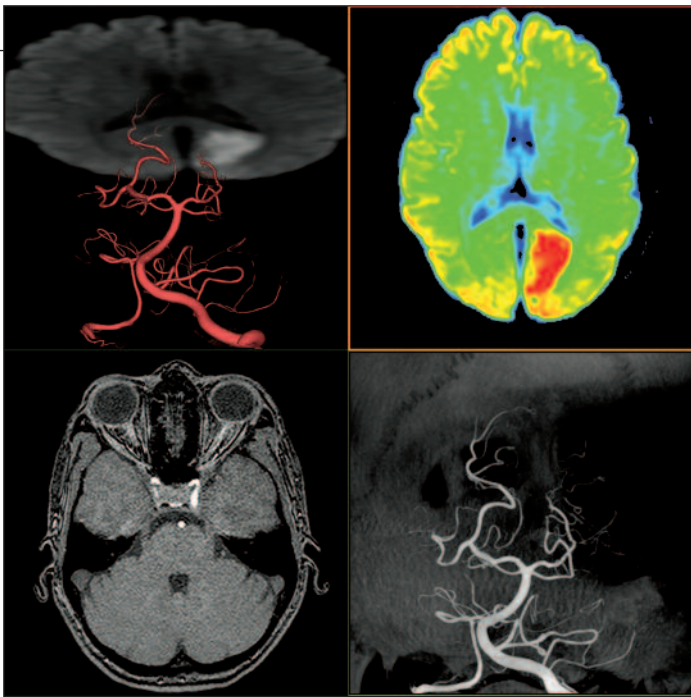
CT Perfusion allows a quick and reliable assessment of cerebral perfusion disturbances type and extent. It provides qualitative and quantitative assessment of regional blood flow, regional blood volume, mean transit time and tissue characterization parameters.



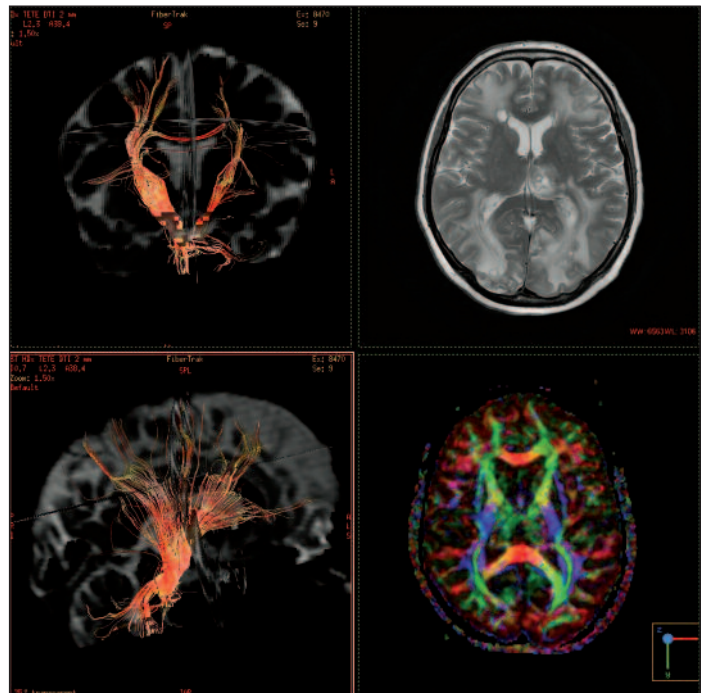
Innova 3DXR reconstructs the 2D spin sequences from Innova into an Innova 3D or Innova CT model. Accurate measurements of the aneurysm size and volume can be performed.



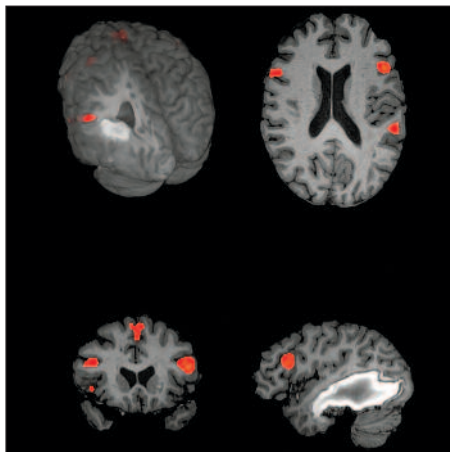
Volume Viewer enables Full Fusion of 3D Angio and CT/MR data to bring the complete soft tissue and fine vessel information together for critical neuro interventions.



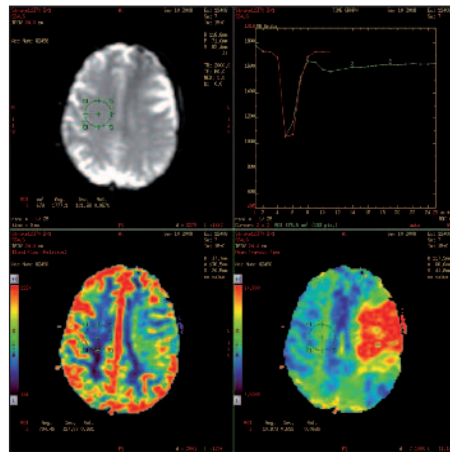
Fusion MR performs "on the fly" 3D image registration and fusion of anatomical MR, functional volumes and Innova 3D.



Fibertrack process MR diffusion tensor data into ADC, Diffusion and anisotropy (FA) maps, and can produce 3D rendering of "white matter fiber" trajectories.

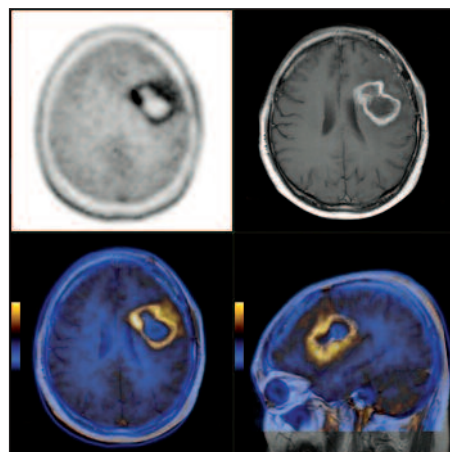
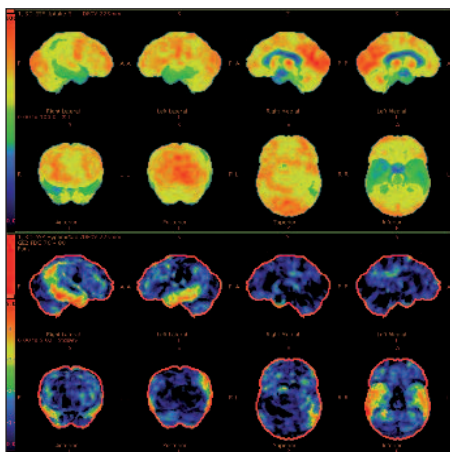


Brainwave enable analysis and visualization of images for functional brain mapping (fMRI).



Brainstat is designed to process a time series of MR images acquired in the brain. It allows visual inspection of time intensity curves and calculation of parametric images.

Cortex ID standardizes the diagnosis of cerebral metabolic deficiencies. It combines fully automated 3D-stereotactic surface projection (SSP) and age-stratified normal PET database, with rich image review capabilities and easy clinical reporting.



Integrated Registration allows fast 3D registration and fusion of PET or SPECT images with other modalities. It may provide physician with additional clinically relevant information in many clinical care areas.

Data subject to change.
Marketing Communications GE Medical Systems
Société en Commandite Simple au capital de 63.277.470 Euros
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About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our “healthymagination” vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality and efficiency around the world. Headquartered in the United Kingdom, GE Healthcare is a \$16 billion unit of General Electric Company (NYSE: GE). Worldwide, GE Healthcare employs more than 46,000 people committed to serving healthcare professionals and their patients in more than 100 countries. For more information about GE Healthcare, visit our website at www.gehealthcare.com

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GE imagination at work