SIEMENS

syngo.via – Get the full picture.

The 3D routine and advanced reading solution.

www.siemens.com/*syngo*.via

Answers for life.

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Contents

syngo.via – overview

syngo.via
Get the full picture.

The *syngo*.via[1] 3D routine and advanced reading solution helps to accelerate workflows across all modalities, and is perfect for both day-to-day and more challenging cases.

It is efficient: automated pre-fetching of prior examinations and preprocessing saves valuable time, allowing physicians and technologists to focus on their core patient-centric tasks.

It is flexible: modular licensing models are available, so you can expand *syngo*.via with your needs. It makes it easy to share findings for fast and reliable clinical decisions – even on mobile devices[2].

And above all, **it's intelligent:** it guides users through the entire workflow. It identifies human anatomy for reliable and reproducible diagnostic results. And it enables you to deliver the relevant findings in one single report.

With *syngo*.via, you don't just read images – you get the full picture.

[1] *syngo*.via can be used as a stand-alone device or together with a variety of *syngo*.via-based software options, which are medical devices on their own right. *syngo*.via and the *syngo*.via based software options are not commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.
[2] Not for diagnostic use on mobile devices in the USA.

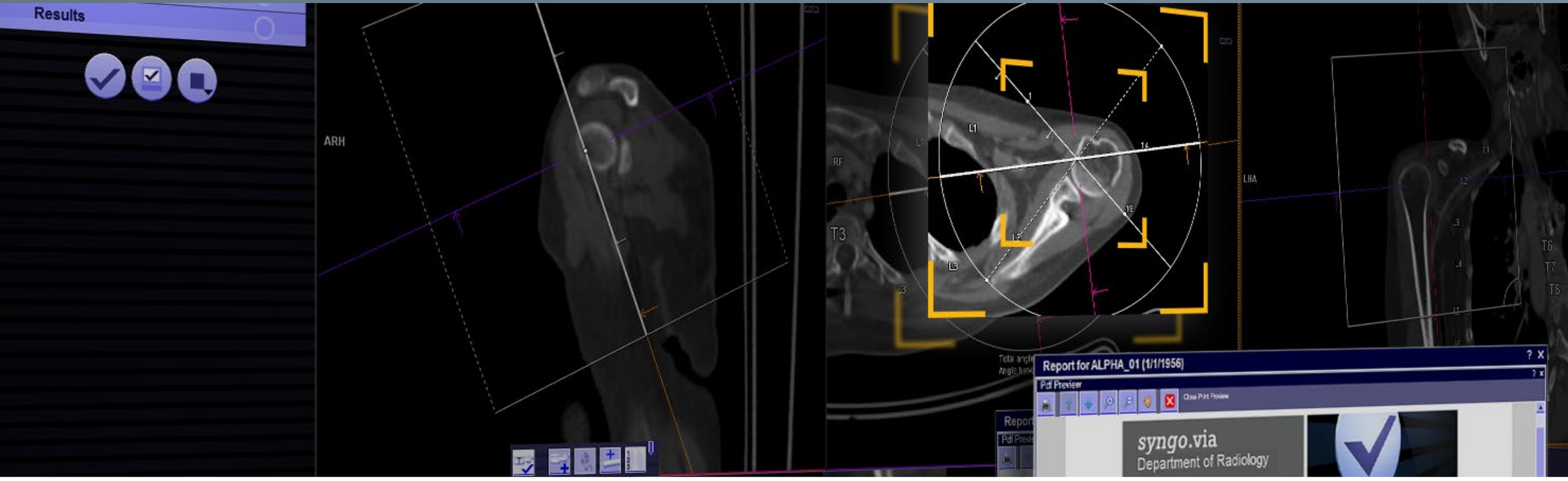
syngo.via

Get the full picture.

syngo.via is...
Efficient

syngo.via[1] helps to accelerate radiological workflows and save valuable time. You can access and read cases quickly and easily with features such as automated pre-processing and pre-fetching of prior examinations.

[1] *syngo*.via can be used as a stand-alone device or together with a variety of *syngo*.via-based software options, which are medical devices on their own right. *syngo*.via and the *syngo*.via based software options are not commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.



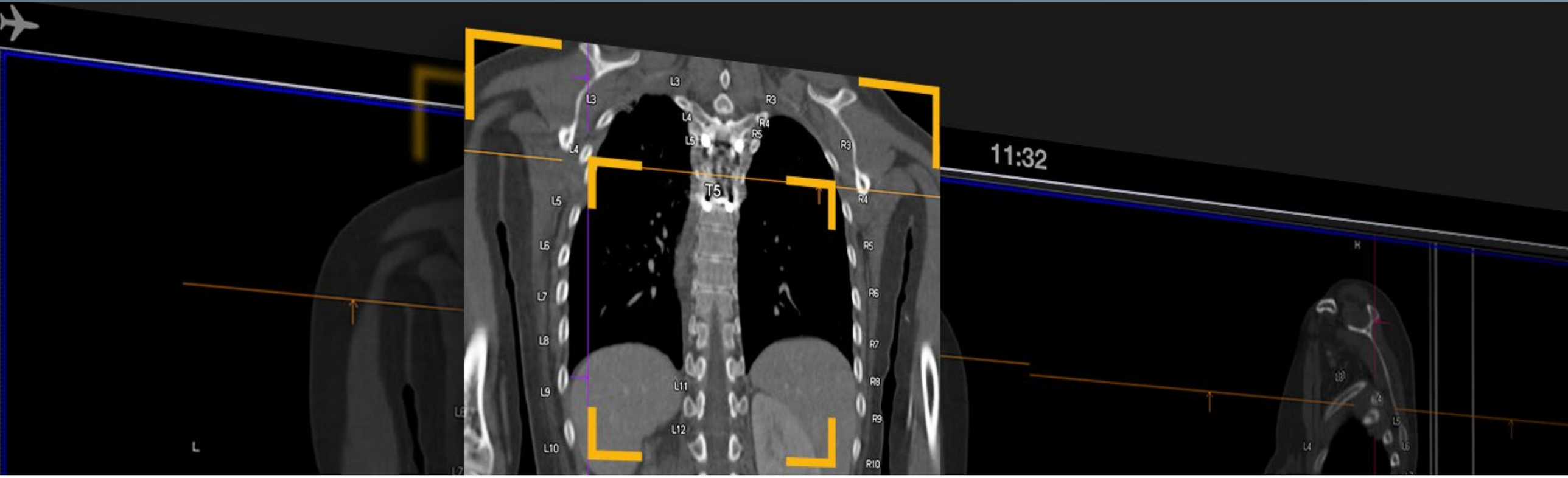
syngo.via is...
Flexible

Modular licensing enables you to expand *syngo*.via[1,2] with the needs of your medical facility - whether it's a specialized practice or a major research hospital.

[1] For mobile devices such as iPhone and iPad country specific laws may apply. Please refer to these laws before using.

[2] *syngo*.via can be used as a stand-alone device or together with a variety of *syngo*.via-based software options, which are medical devices on their own right. *syngo*.via and the *syngo*.via based software options are not commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

Picture: The application is not for diagnostic reading on mobile devices. Diagnostic reading of images with a web browser requires a medical grade monitor.
For mobile devices such as iPhone and iPad country specific laws may apply. Please refer to these laws before using.



syngo.via is...
Intelligent

syngo.via[1] guides you through the entire workflow. It identified human anatomy to support reliable and reproducible diagnostic results. And, it enables you to deliver the relevant findings in one single report.

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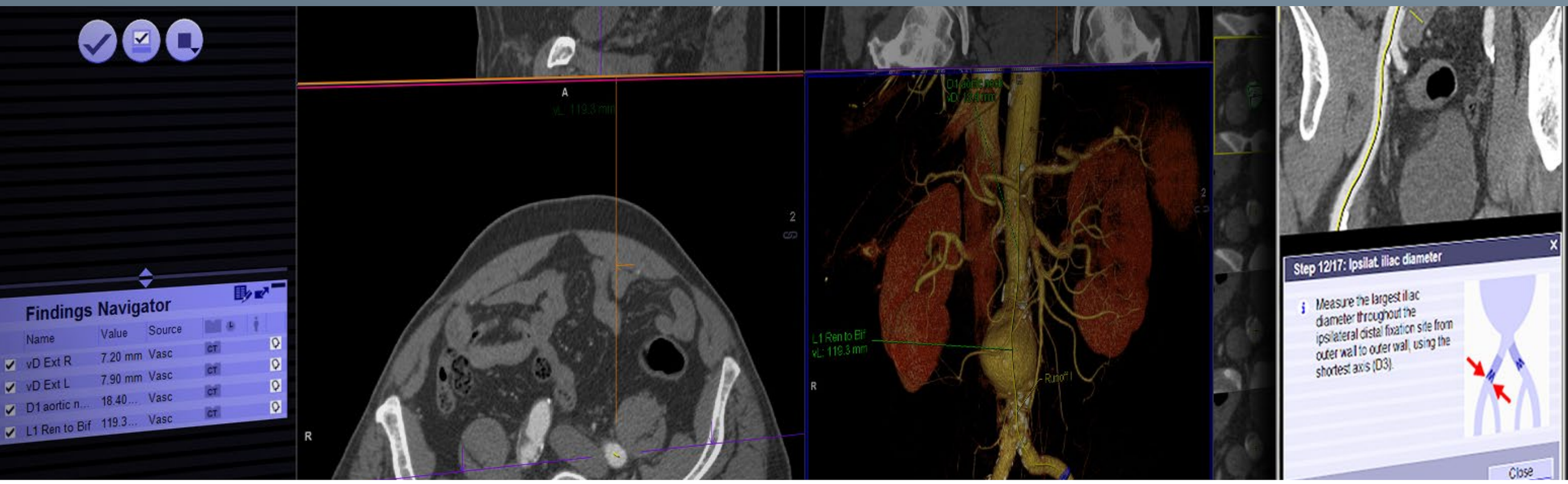

Configurations:
From efficiency to excellence

With *syngo*.via Element CT and the established *syngo*.via Workstation and *syngo*.via Server, Siemens offers 3D reading software for both routine and advanced applications. This gives customers the flexibility they need – whether they are based at a specialized practice or a major research hospital.

NEW

Entry-level solution

Configurations: *syngo*.via Element CT

Boost your CT scanner. With *syngo*.via Element CT

- Designed for use with the SOMATOM Scope, SOMATOM Emotion and SOMATOM Perspective
- Single-user license includes remote access capabilities.

syngo.via[1] Element CT provides the ideal performance boost for your SOMATOM scanner. The convenient and flexible reading workplace optimizes your scanning workflow and helps you make more confident diagnoses.

syngo.via Element CT delivers exciting tools for routine and advanced 3D and 4D CT image processing and reading – including the latest and most exciting innovations such as *syngo*.CT Dual Energy and *syngo*.CT Bone Reading.

[1] *syngo*.via can be used as a stand-alone device or together with a variety of *syngo*.via-based software options, which are medical devices on their own right. *syngo*.via and the *syngo*.via based software options are not commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

Configurations:
syngo.via Workstation

The flexible multimodality solution

- Delivers a full range of applications across all modalities and clinical fields
- Multi-client, single-user license
- Mobile extension *syngo*.via WebViewer[2] included[3]

***syngo*.via[1] Workstation** delivers state-of-the-art 3D routine and advanced reading functionality, offering the full range of *syngo*.via applications across all modalities and clinical fields. You can connect to the workstation from any client, and it allows a single user to leverage the full functionality of all applications.

You can select a Workstation solution tailored to your size and budget, allowing you to benefit from the complete *syngo*.via feature set.

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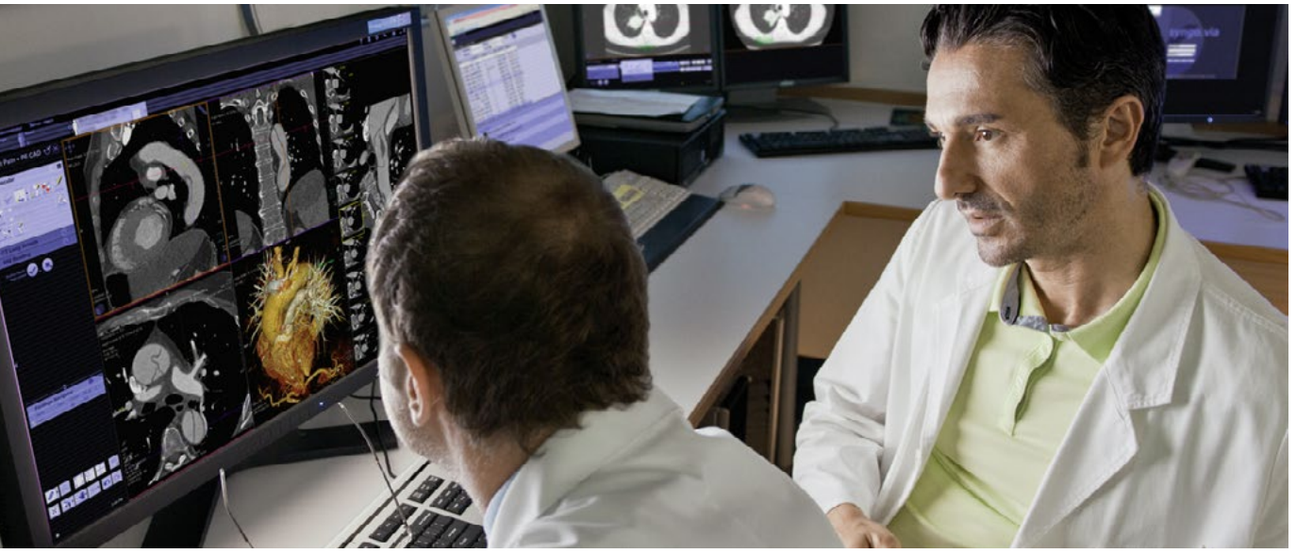
[2] *syngo*.via WebViewer is not for diagnostic viewing/reading on mobile devices in the US. Please refer to your sales representative whether the product is available for your country. Diagnostic reading of images with a web browser requires a medical grade monitor. For iPhone and iPad country specific laws may apply.
Please refer to these laws before using for diagnostic reading/viewing.

[3] Only for countries with approval for *syngo*.via WebViewer VA11B.
Only available for new installations of *syngo*.via VA30 (Workstation, L – or XL Software) with new SKU-F HW.

Configurations:
syngo.via Server



The end-to-end, network-ready solution

- Delivers a full range of applications across all modalities and clinical fields
- Multi-client, multi-user
- Full sharing options
- Mobile extension *syngo*.via WebViewer[2] included[3]

***syngo*.via Server** delivers excellent 3D routine and advanced reading functionality to multiple users working simultaneously. This server-based solution allows users within a department or even across the entire hospital to make full use of *syngo*.via applications for all modalities and clinical fields. It makes workflows more flexible, too, by enabling physicians to view images anywhere – even on mobile devices[1] – and easily share them with colleagues.

syngo.via Server offers you full scalability and integrates seamlessly with your modalities and hospital IT.

[1] For mobile devices such as iPhone and iPad country specific laws may apply. Please refer to these laws before using.

[2] syngo.via WebViewer is not for diagnostic viewing/reading on mobile devices in the US. Please refer to your sales representative whether the product is available for your country. Diagnostic reading of images with a web browser requires a medical grade monitor. For iPhone and iPad country specific laws may apply.
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More efficiency through intelligence: the new VA30 feature highlights

syngo.via VA30 includes a host of new and improved functions that deliver additional reading benefits while boosting workflow efficiency. With features such as an enhanced image text editor for viewing and printing, an optimized print layout editor, and adjustable text size, *syngo*.via is easier to work with than ever before.

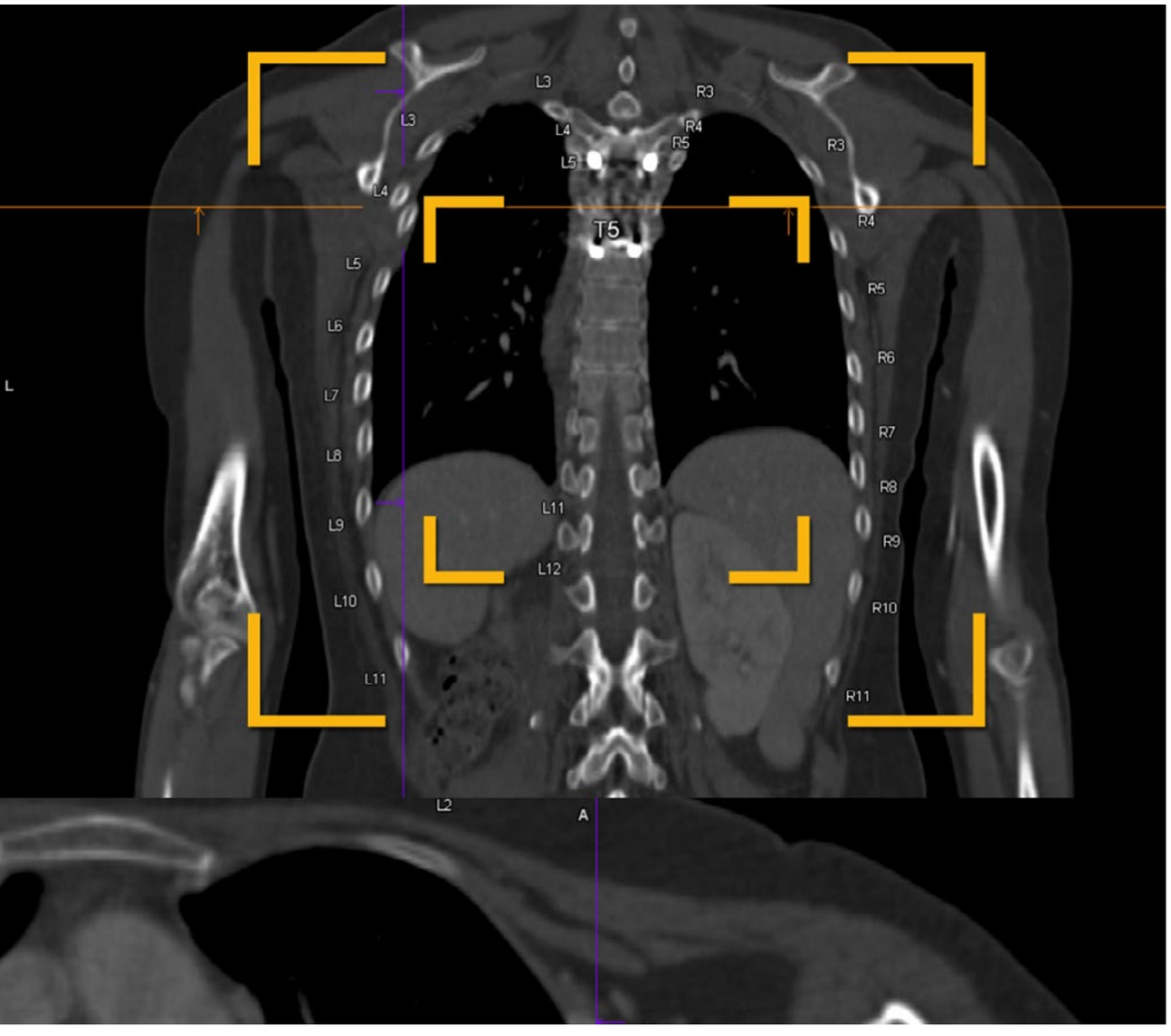
The new version of *syngo*.via significantly streamlines the routine reading process. Its improved Region Growing functionality ensures even greater precision when quantifying volumes, while Rib Labeling further automates and accelerates workflows. The new Ranges Dialog orientation tool enables simple navigation through images in all planes and from all directions. Moreover, new annotation options such as Arrow and Free Text make it easier to comment on findings.

>> go to www.siemens.com/*syngo*.via-applications

New VA30 feature highlights:
ALPHA technology

NEW

VA30 routine feature

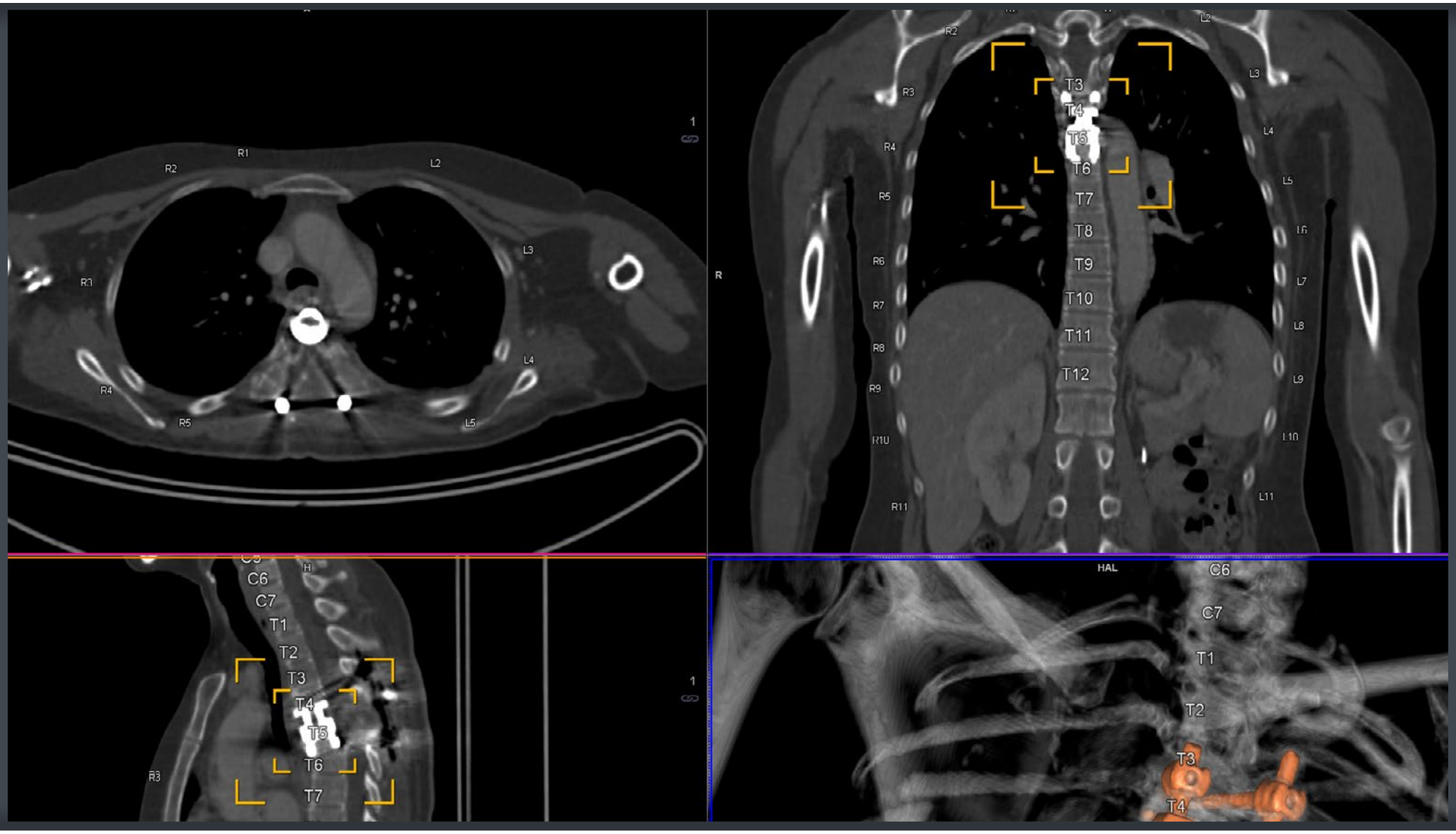


By automatically recognizing and parsing anatomical landmarks, ALPHA technology significantly accelerates reading workflows. Anatomical range presets define optimal settings for generating images in line with the part of the body being scanned. This not only saves additional time, it also improves consistency in image presentation.

New VA30 feature highlights:
ALPHA technology

NEW

VA30 routine feature



NEW

VA30 routine feature

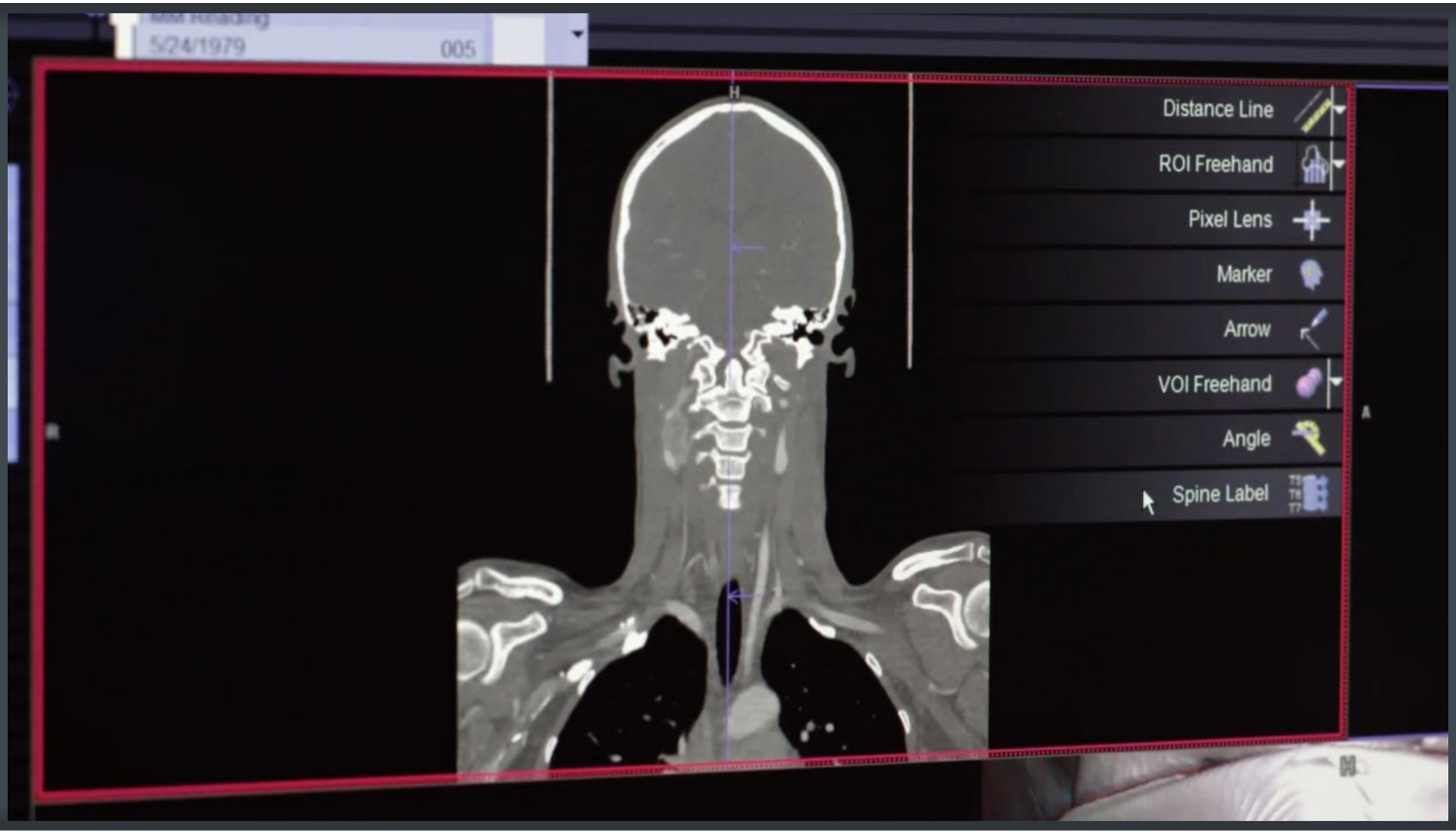
New VA30 feature highlights: *syngo*.via Advanced Reporting

With *syngo*.via **Advanced Reporting**, you benefit from highly efficient, highly structured communication of all results. Findings can be integrated into a diagnostic report in RTF format or into a PACS in DICOM SC, and users can select from a number of print layout options. You can easily edit and create sections and pick lists within your reports, plus you can rapidly generate your own templates in line with your particular requirements. In addition, thanks to support for cross-workflow reporting, you can combine results from multiple modalities in one single document.

NEW

VA30 routine feature

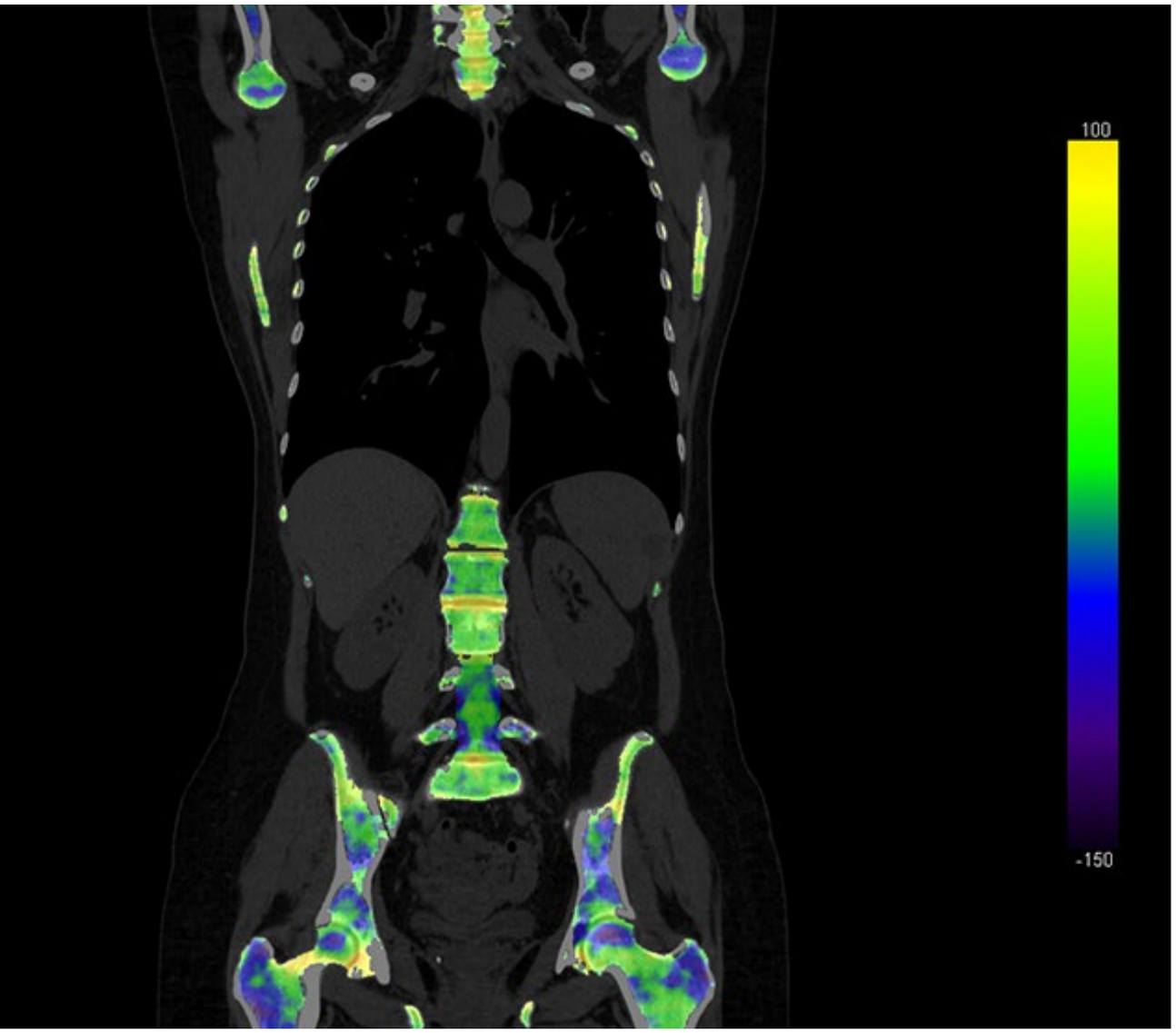
New VA30 feature highlights: *syngo*.via Advanced Reporting



NEW

VA30 Onco feature

New VA30 feature highlights: *syngo*.CT DE Bone Marrow[1]



Bone marrow can be affected by various pathologies, such as bone bruises following trauma and diffuse tumor infiltrations. Until recently, these were mainly evaluated with MRI scanners. Now, Dual Energy technologies have made CT imaging a viable diagnostic option for these cases.

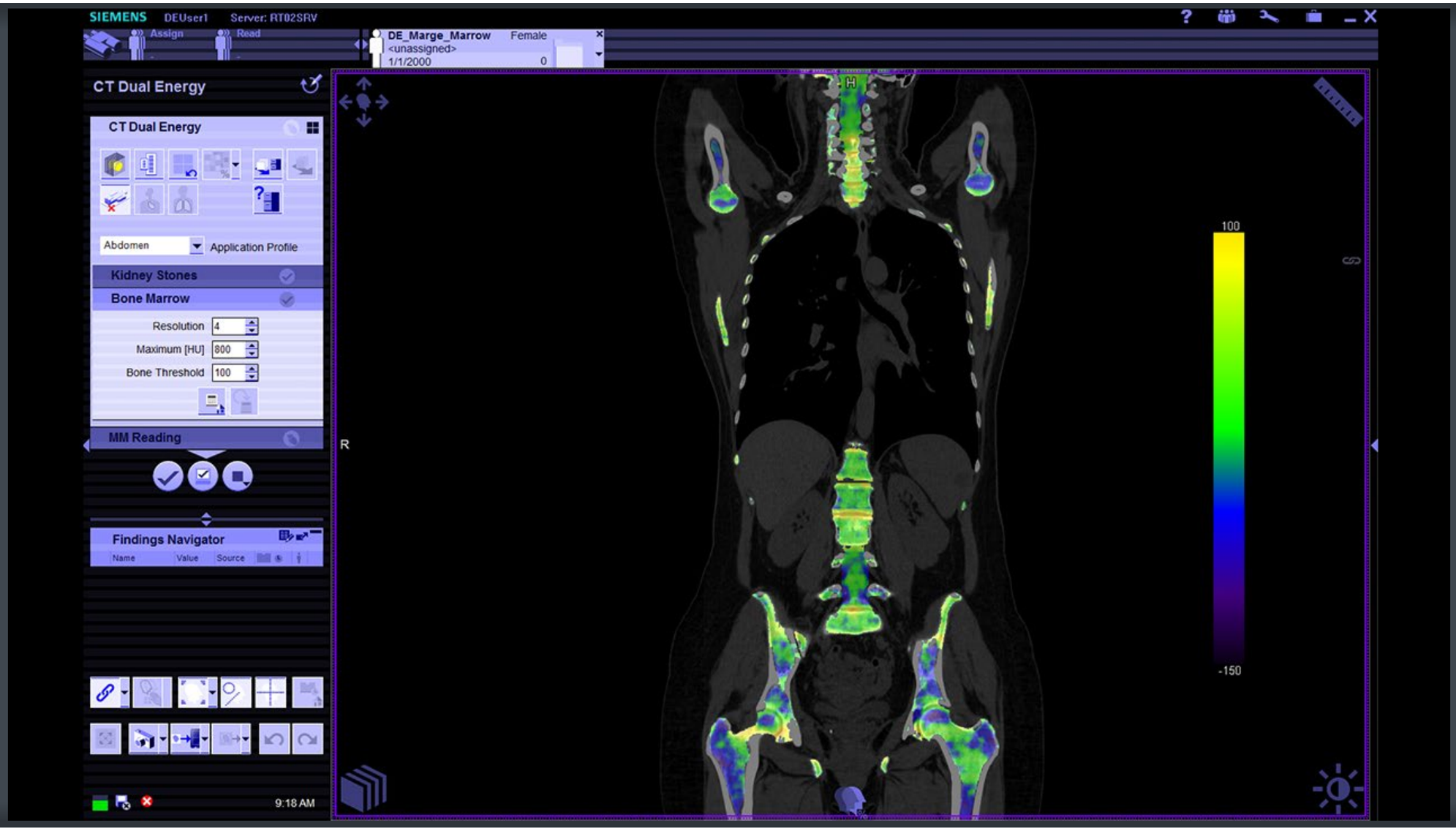
syngo.CT DE Bone Marrow[1] enables segmentation and visualization (color coding) of bone marrow based on material decomposition into bone marrow and calcium. This application is compatible with both dual source and single source data sets.

[1] *syngo*.CT DE Bone Marrow[1] is pending 510(k) clearance, and is not yet commercially available in the United States.

NEW

VA30 Onco feature

New VA30 feature highlights: *syngo*.CT DE Bone Marrow[1]

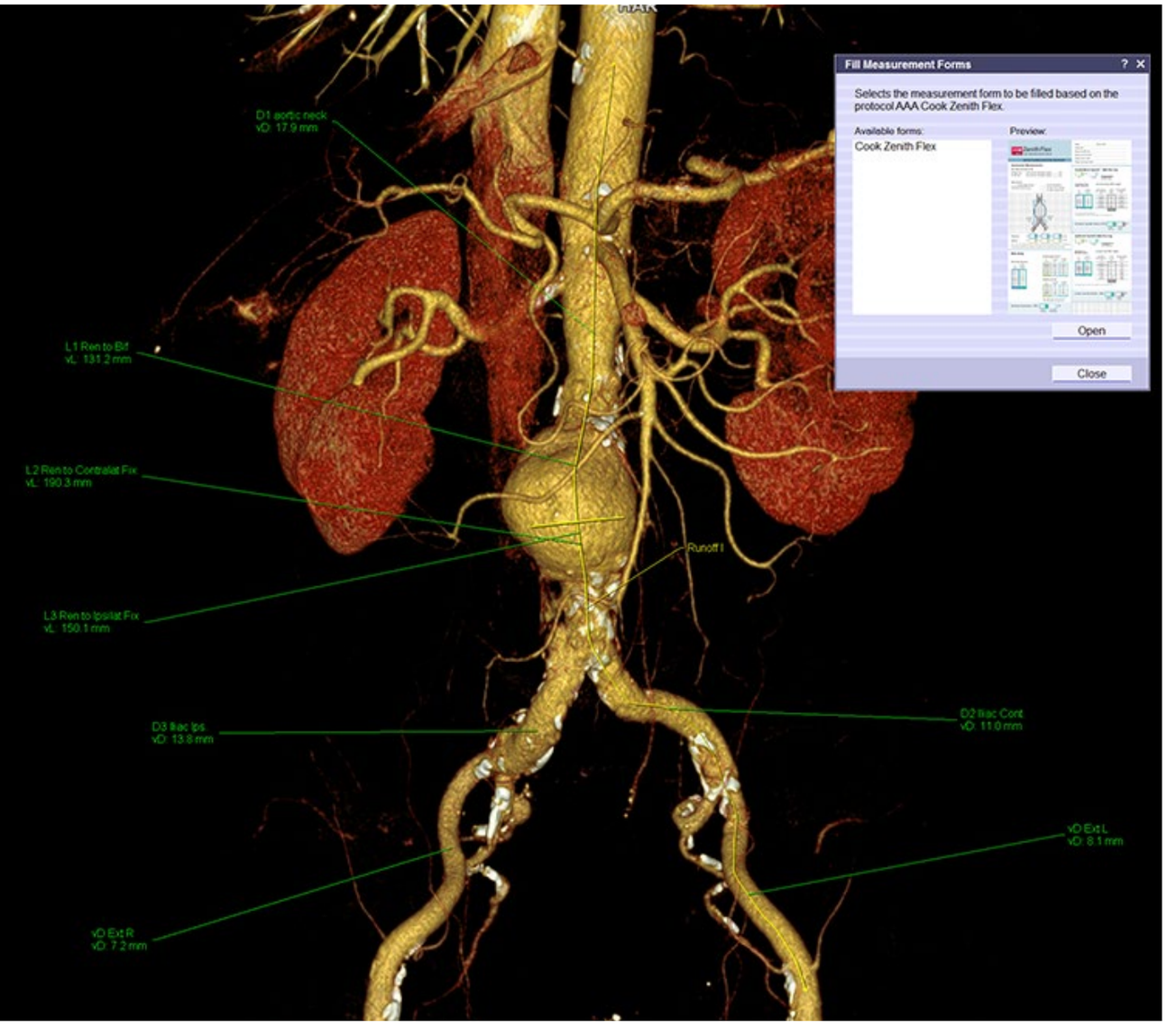


[1] *syngo*.CT DE Bone Marrow[1] is pending 510(k) clearance, and is not yet commercially available in the United States.

NEW

VA30 Vascular feature

New VA30 feature highlights: *syngo*.CT Rapid Stent Planning[1]



syngo.CT Rapid Stent Planning[1]

Filling out stent forms used to be a time-consuming, error-prone task. *syngo*.CT Rapid Stent Planning[1] addresses this challenge by automatically populating manufacturer-specific stent order forms. It works seamlessly with Rapid Results Technology: after the user has been guided through the measurement workflow, the relevant data is directly transferred to the corresponding form.

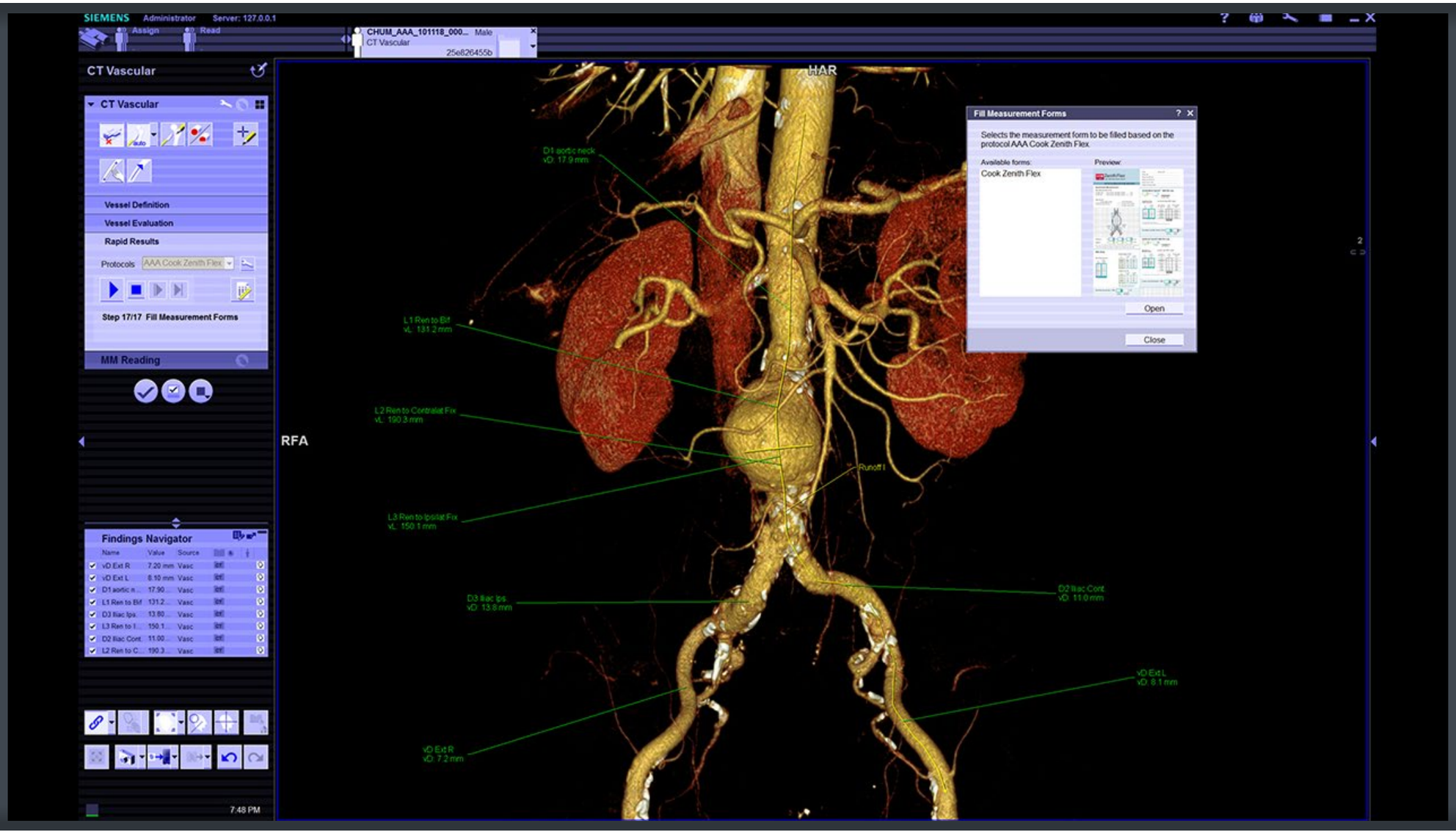
The application supports Gore Excluder, Zenith Flex, and Medtronic Endurant forms in PDF format – plus customers can generate new templates for additional vendors.

[1] *syngo*.CT Rapid Stent Planning[1] is pending 510(k) clearance, and is not yet commercially available in the United States.

NEW

VA30 Vascular feature

New VA30 feature highlights: *syngo*.CT Rapid Stent Planning[1]



[1] *syngo*.CT Rapid Stent Planning[1] is pending 510(k) clearance, and is not yet commercially available in the United States.

New VA30 feature highlights: *syngo*.PET Segmentation – EQ.PET

NEW
VA30 Onco feature

syngo.PET Segmentation – EQ.PET

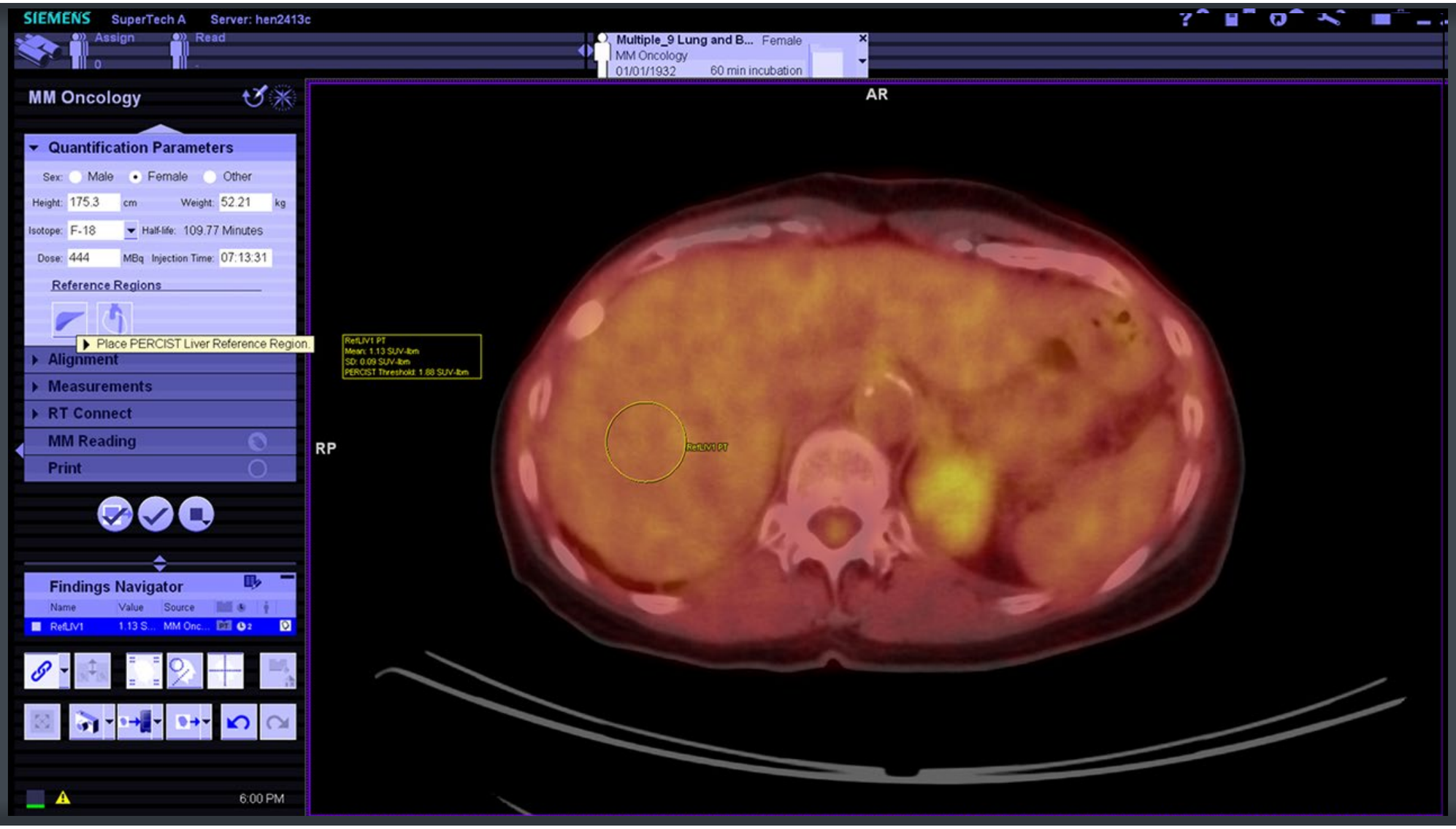
syngo.PET Segmentation with the new EQ.PET feature supports assessment of longitudinal patient studies with SUV quantification, independent of reconstruction method and scanner make or model.

syngo.PET Segmentation expedites reading of PET images, including for follow-up exams. It enables simultaneous PET and CT lesion segmentation and quantification, and automates calculation of volume, RECIST, SUVpeak, SUVmax, plus other metrics. Moreover, it facilitates full implementation of PERCIST standardized response criteria.

NEW

VA30 Onco feature

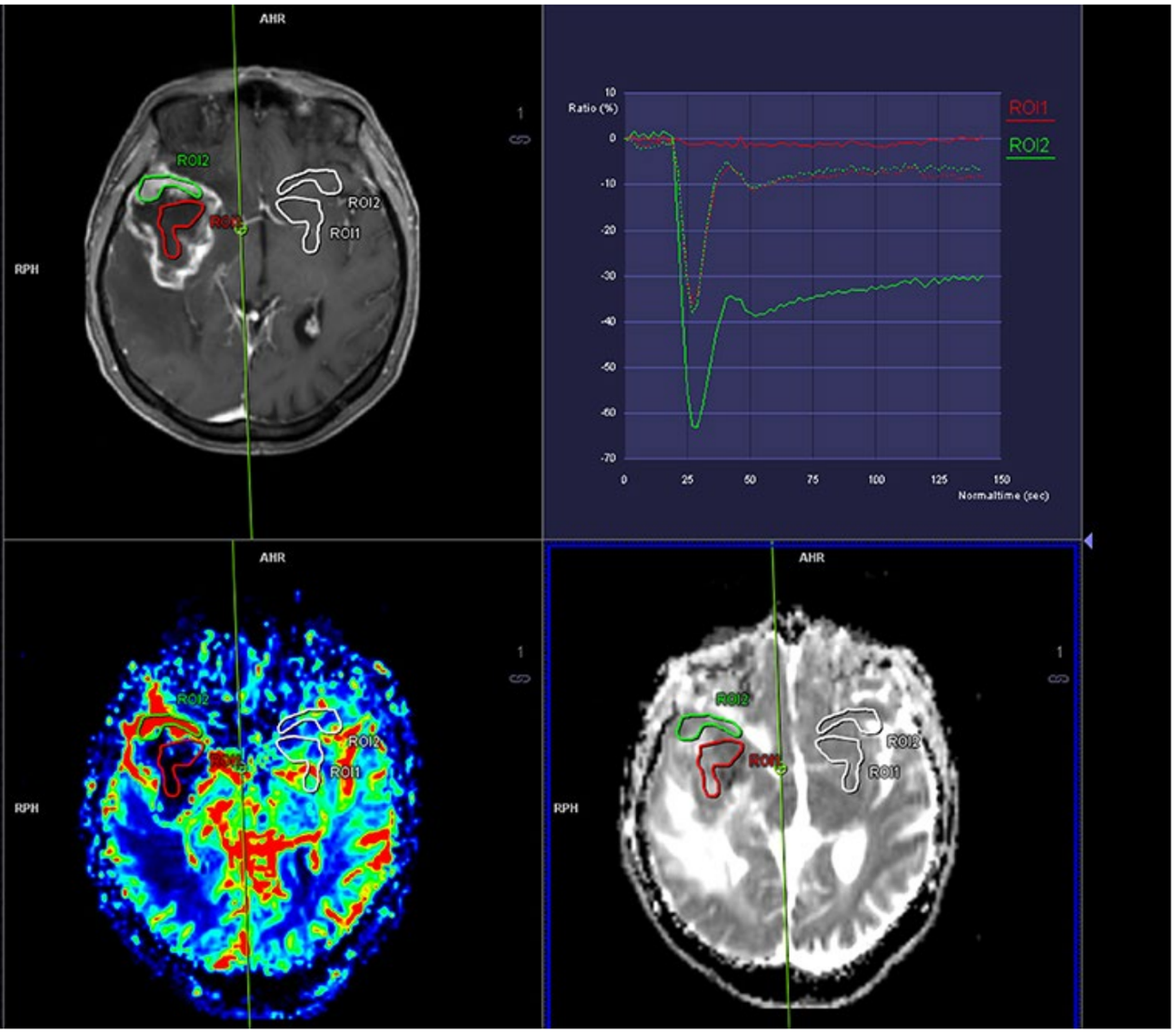
New VA30 feature highlights:
syngo.PET Segmentation – EQ.PET



New VA30 feature highlights: *syngo*.MR Neuro Tumor

NEW

VA30 Neuro feature



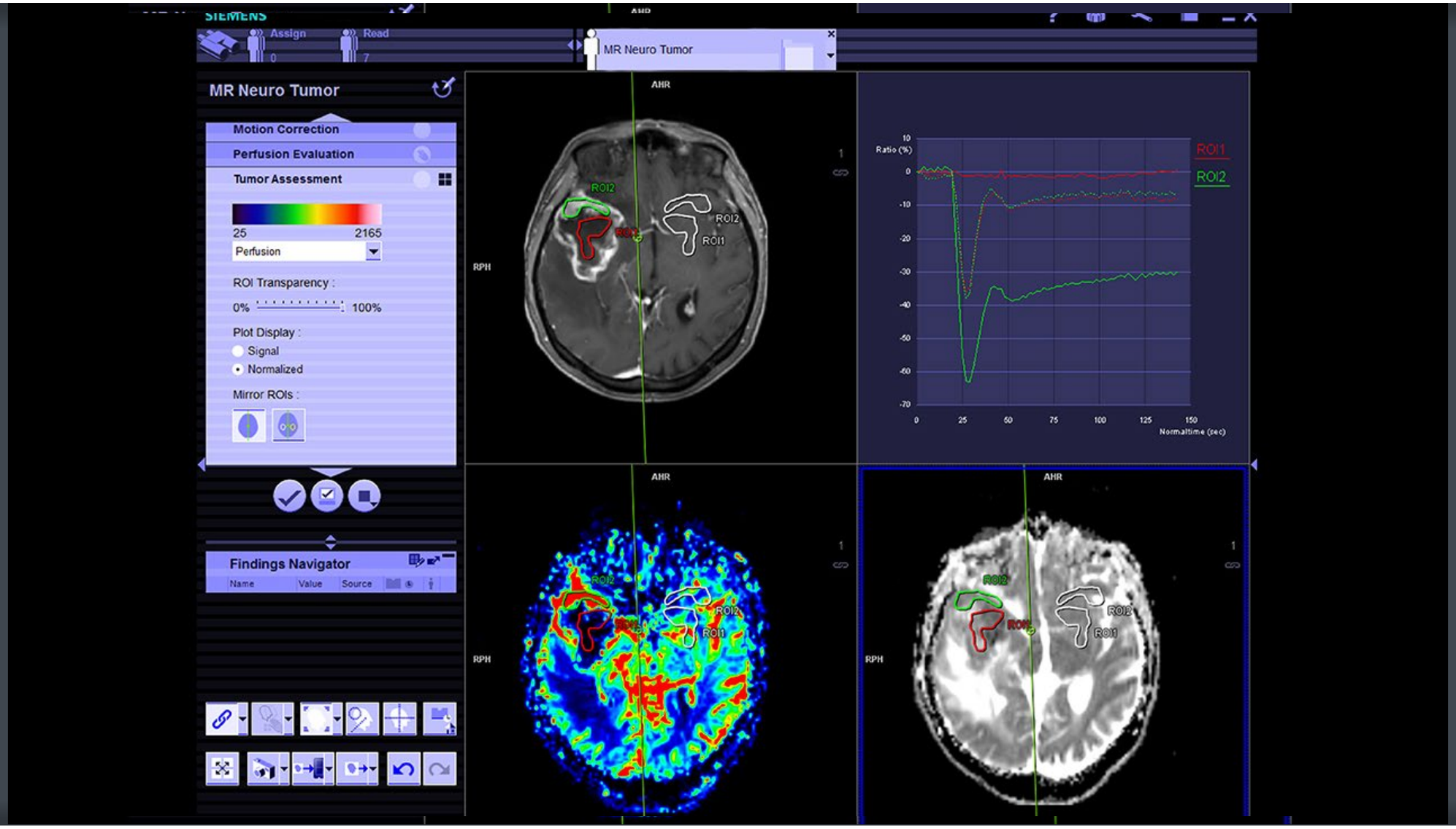
syngo.MR Neuro Tumor

syngo.MR Neuro Tumor supports the entire neurological tumor reading workflow. It provides an at-a-glance overview of all key structural and dynamic imaging data, and makes it easy to generate motion-corrected perfusion maps. Plus, mean curve analyses deliver deeper insight into ROIs, both in anatomical and perfusion images – for greater diagnostic confidence.

NEW

VA30 Neuro feature

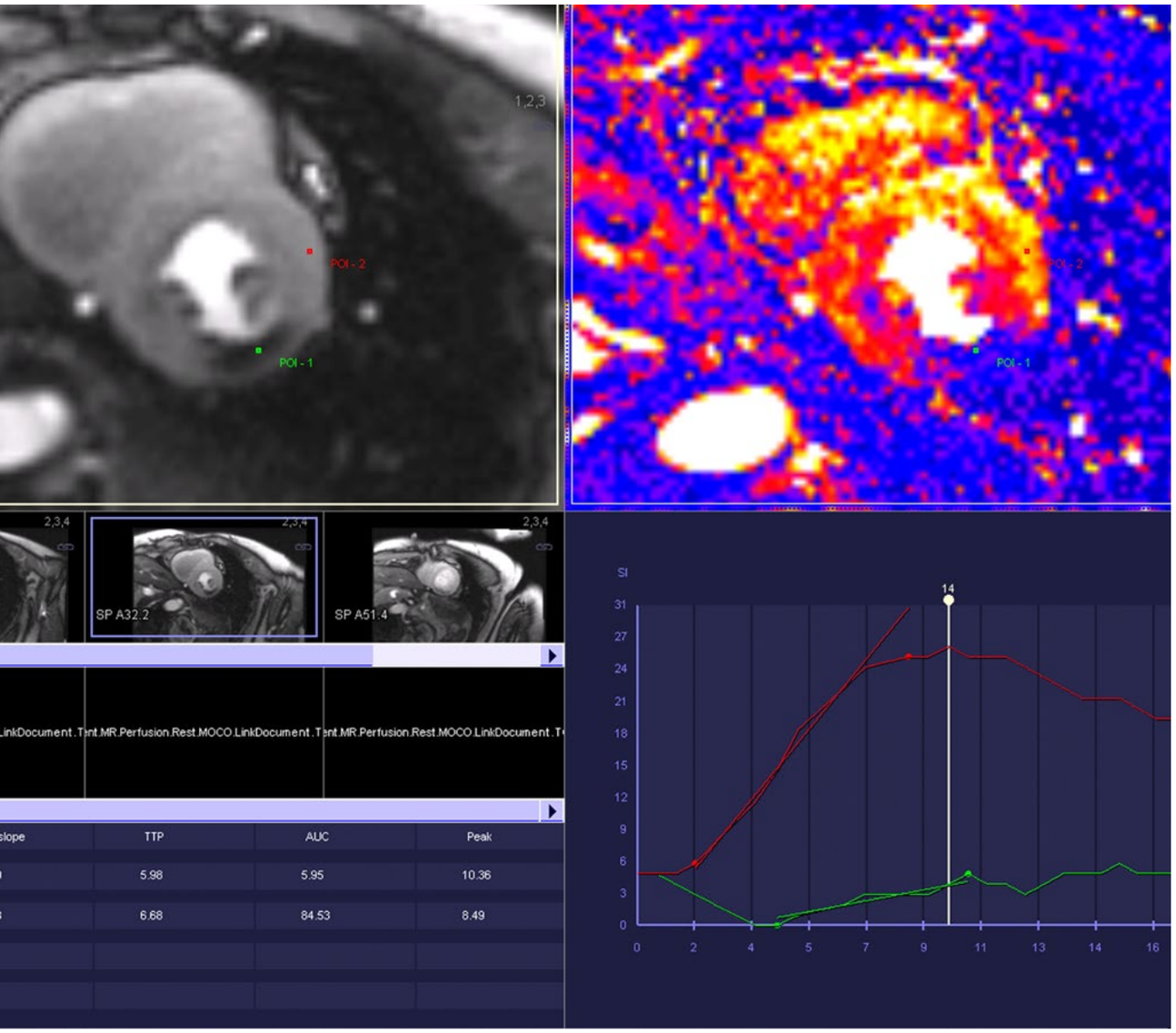
New VA30 feature highlights: *syngo*.MR Neuro Tumor



New VA30 feature highlights: *syngo*.MR Cardiac Perfusion

NEW

VA30 Cardio feature



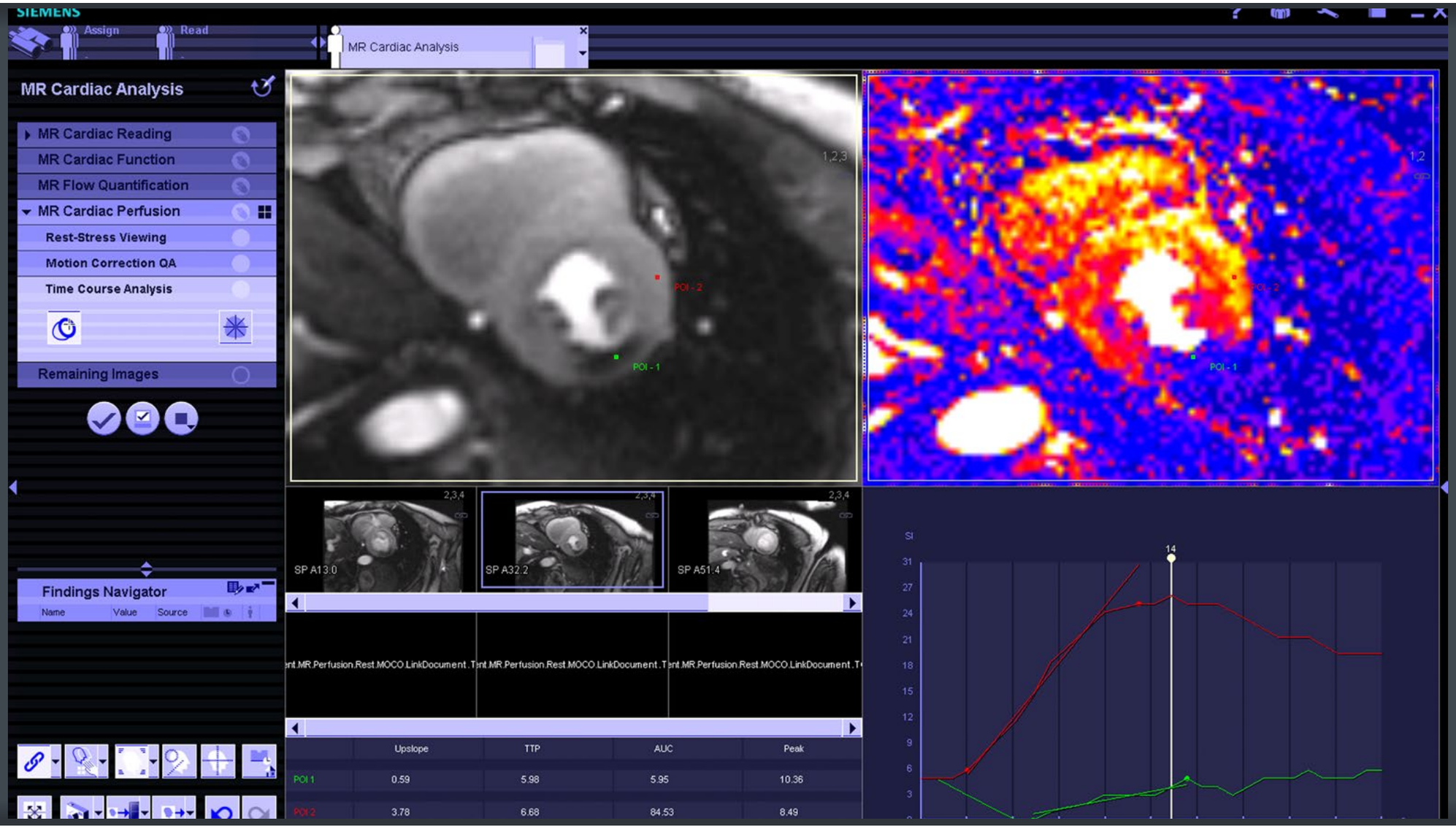
syngo.MR Cardiac Perfusion

Supports the analysis and evaluation of cardiac perfusion studies. This application enables users to rapidly analyze pixel-based parametric up-slope maps. The quality of the maps is optimized due to fully system-guided motion correction.

NEW

VA30 Cardio feature

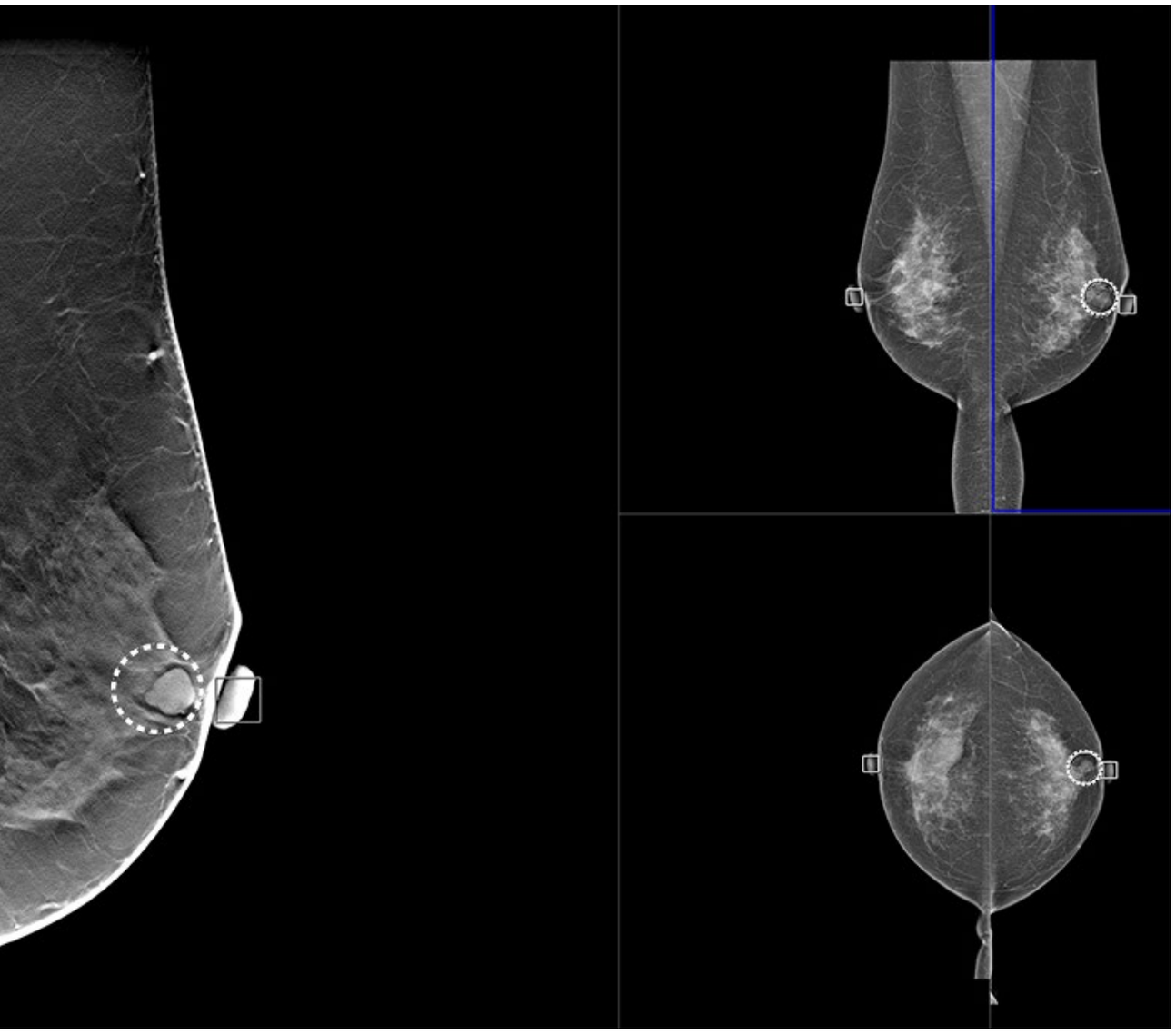
New VA30 feature highlights: *syngo*.MR Cardiac Perfusion



NEW

VA30 Mammo feature

New VA30 feature highlights: *syngo*.Breast Care Link-it[1]



syngo.Breast Care Link-it

syngo.Breast Care Link-it[1] makes it easier to compare lesions across multiple exams, even ones obtained with other mammography systems. It enables radiologists to match regions of interest in one view to the corresponding location in any other view. This includes links between different 2D views and 3D tomosynthesis volumes.

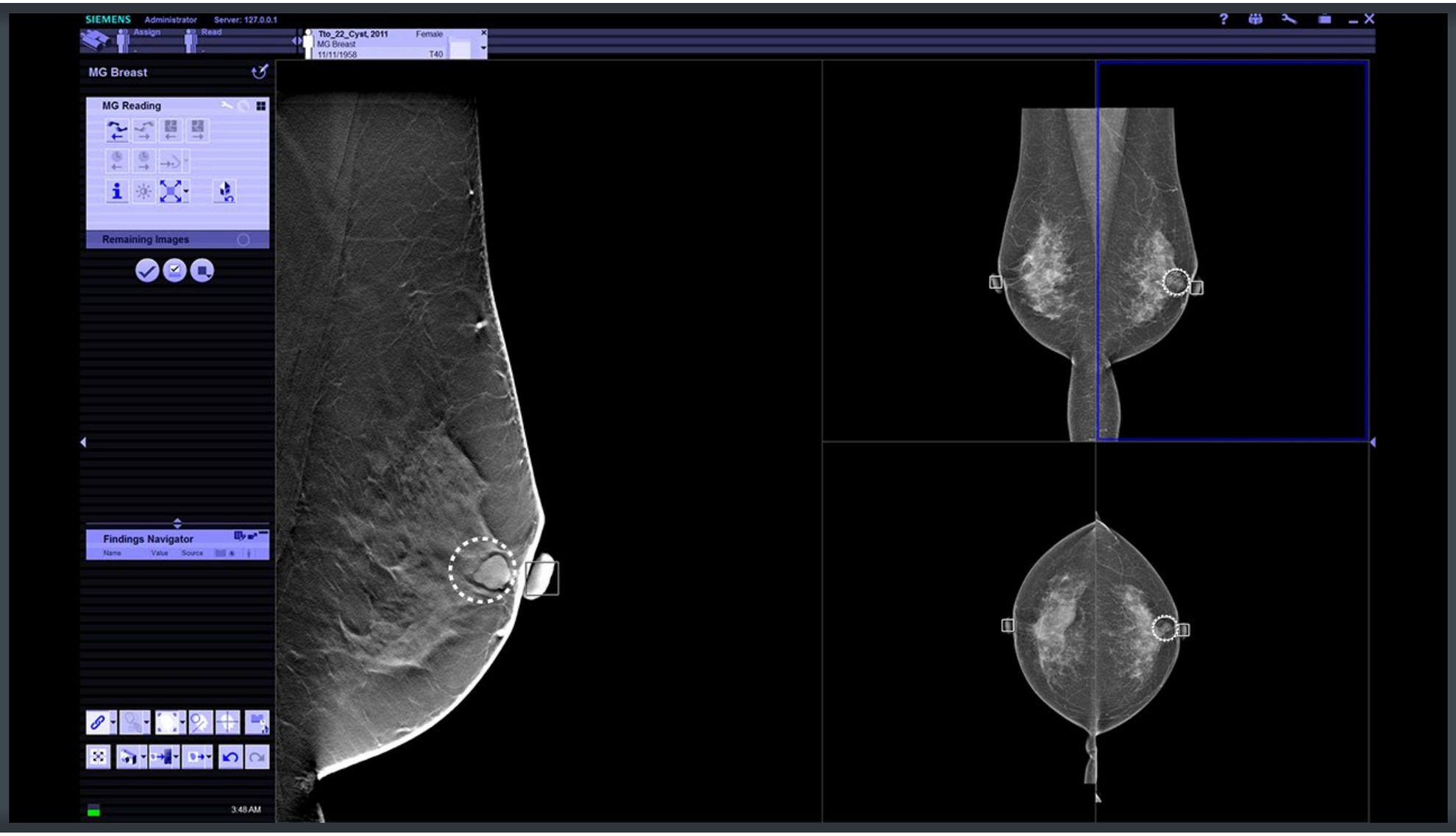
The result: faster decision making and increased diagnostic confidence.

[1] *syngo*.Breast Care Link-it[1] is not commercially available. Due to regulatory reasons its future availability cannot be guaranteed.

NEW

VA30 Mammo feature

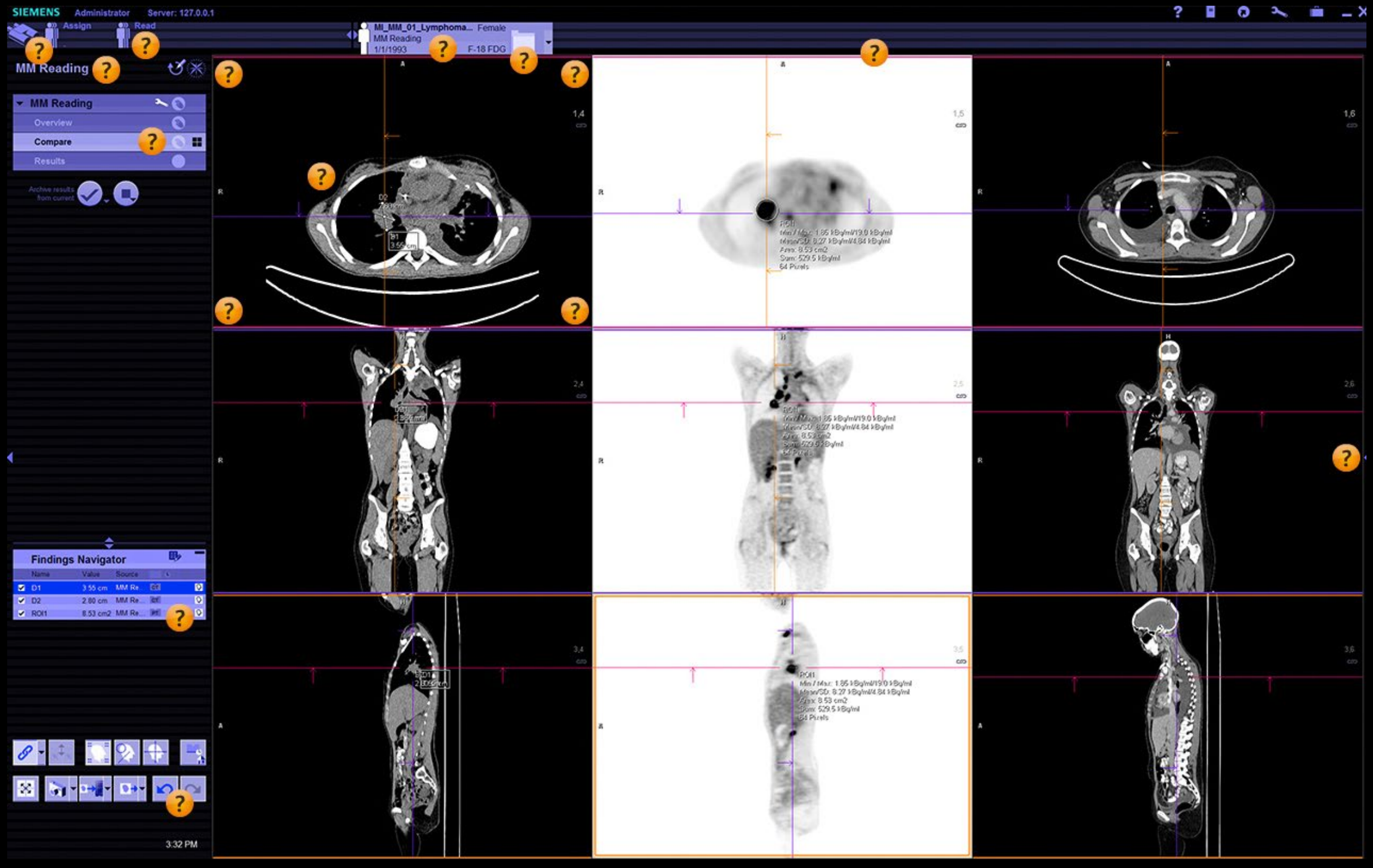
New VA30 feature highlights: *syngo*.Breast Care Link-it[1]



[1] *syngo*.Breast Care Link-it[1] is not commercially available. Due to regulatory reasons its future availability cannot be guaranteed.

Interactive user interface

See how the Case Navigator guides you through the reading of a case. The Corner Menus give you access to the relevant tools directly from the clinical image – so you can stay focused on your core task. All measurements are collected in the unique Findings Navigator, from which they can later be used to populate a report or for a clinical demonstration.



syngo.via Efficiency Study

syngo.via was designed to more rapidly deliver results and improve patient-centric productivity. To determine whether this is borne out in practice, Siemens conducted a multi-site *syngo*.via Efficiency Study. Participating facilities decided which case mix should be investigated for each workflow in order to best reflect their clinical routine. Then they evaluated a suitable number of cases per workflow regarding the following question: When using *syngo*.via, how much time can be saved and how can patient-centric productivity be improved when compared with a conventional workstation?

Statistical analysis of the study data revealed very positive results: On average, *syngo*.via helped make significant time savings without compromising accuracy at participating clinical sites.[1]

>> go to www.siemens.com/*syngo*.via-efficiency

[1] The outcomes achieved by the Siemens customers during the *syngo*.via Efficiency Study were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption) please be aware that we cannot guarantee, warrant or represent that others will actually achieve the shown time savings and patient-centric productivity. Data on file.

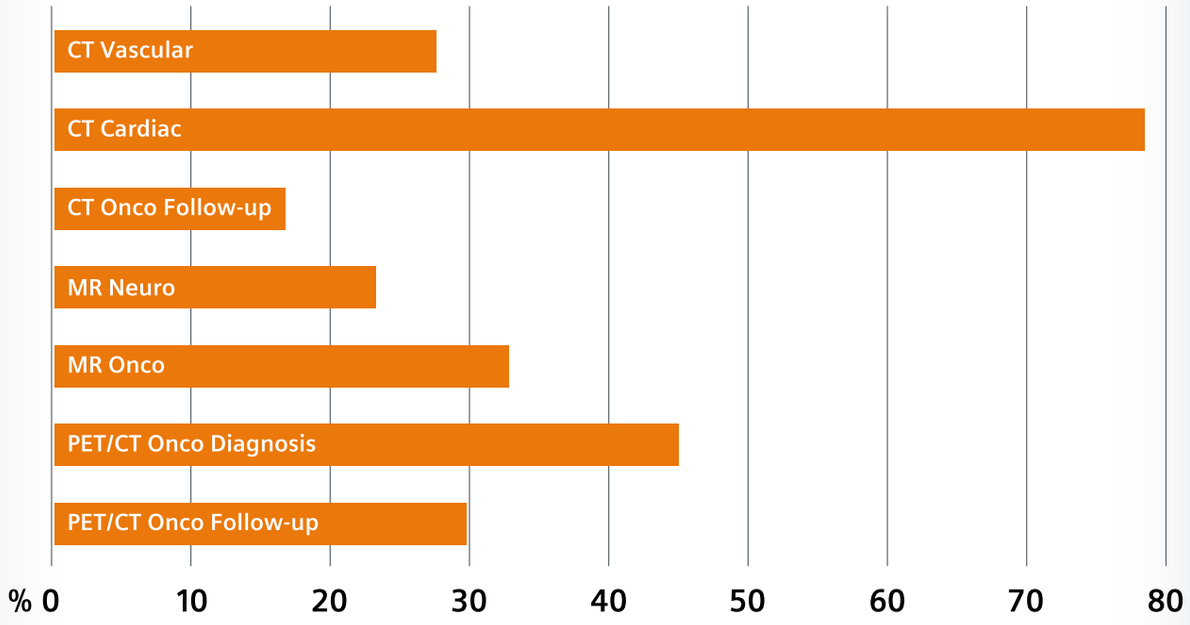
syngo.via Efficiency Study

Efficient workflows – without compromising accuracy

syngo.via Efficiency Study

Efficient workflows – saving valuable time

Observed average time savings with *syngo*.via



If a clinical site is to be successful, it must ensure maximum diagnostic accuracy while maintaining efficient workflows. *syngo*.via helps you do just that, offering a host of essential efficiency features that:

- Organize data sets in line with your preferences
- Sort images
- Prepare cases
- Put the tools you need at your fingertips
- Enable you to define and modify workflow steps in line with requirements
- Enhance workflow efficiency without compromising accuracy

Mobile application

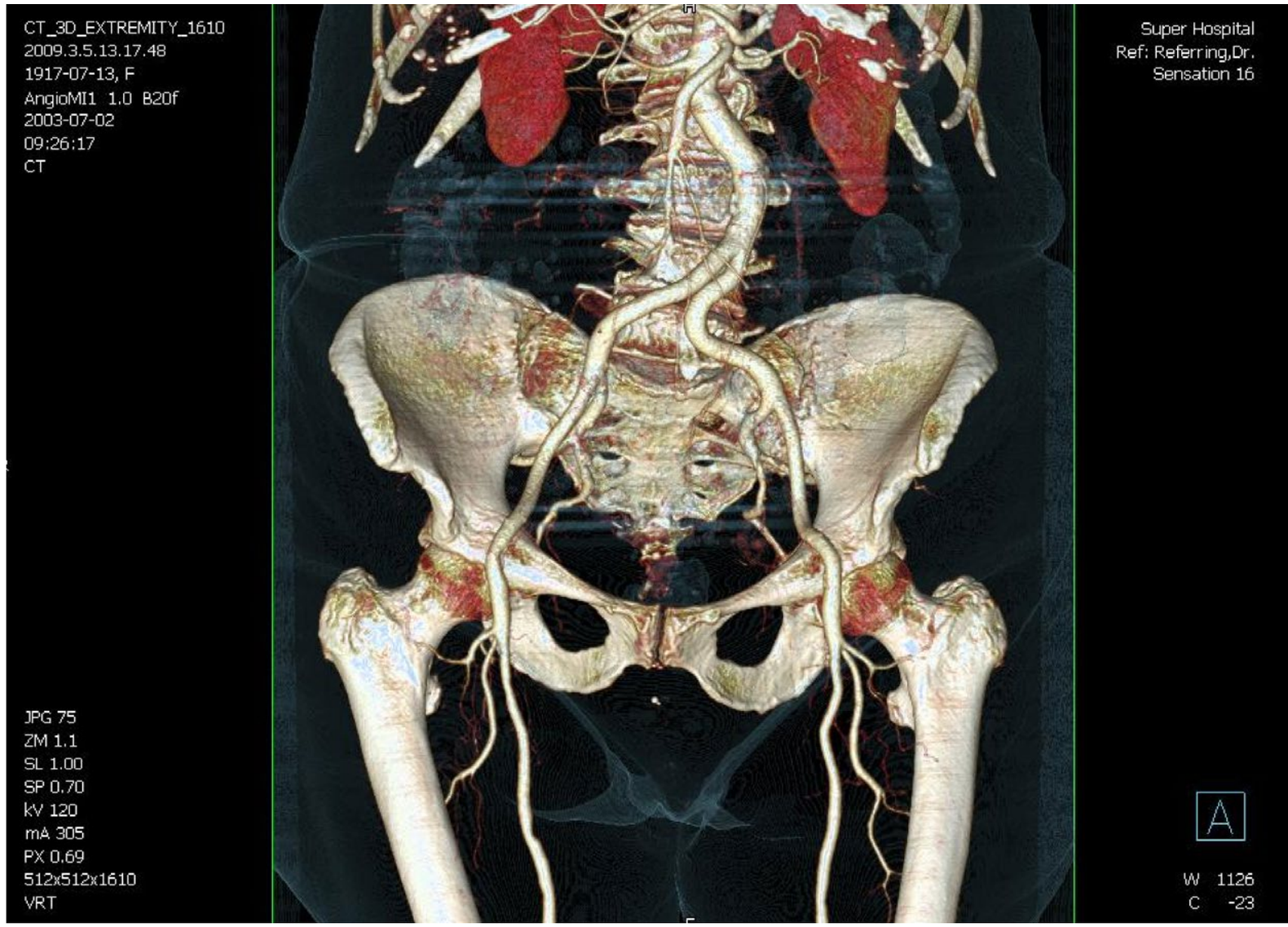
syngo.via WebViewer[1] is the ideal mobile solution for fast reading of images within the hospital network. This is especially true in larger hospital settings where examination rooms, reading rooms, treatment rooms, and patients are all located in different parts of the hospital campus. Users can log on from anywhere[2] on the hospital network via secure connection.

>> go to www.siemens.com/*syngo*.via-mobileapplications

[1] *syngo*.via WebViewer is not for diagnostic viewing/reading on mobile devices in the US. Please refer to your sales representative whether the product is available for your country.
Diagnostic reading of images with a web browser requires a medical grade monitor. For iPhone and iPad country specific laws may apply. Please refer to these laws before using for diagnostic reading/viewing.
[2] Prerequisites include: Internet connection to clinical network, DICOM compliance, meeting of minimum hardware requirements, and adherence to local data security regulations.

Mobile application
syngo.via WebViewer

***syngo*.via WebViewer** makes patient involvement easy. Instead of bringing stationary patients into an office or reading room to explain the diagnosis or the future treatment plan, physicians can simply use the WebViewer wherever the patient is located – **even for discussing 3D images**. And since *syngo*.via WebViewer can be accessed from **a standard Web browser or on an Apple mobile device**, sharing information with fellow physicians in other departments is **fast and easy**.



Mobile application
syngo.via WebViewer – mobile images

Key benefits:

- Seamless collaboration with fellow physicians.
- Use the WebViewer wherever the patient is located.
- Enterprise-grade mobile image reading.
- Excellent image display capabilities and remarkable speed enable rapid reading of time-critical cases while away from a workstation.
- Mobile extension *syngo*.via WebViewer included[3] in all new installations of *syngo*.via VA30.

Experience *syngo*.via WebViewer on our Demo-servers now. There are two ways to access our Demo-servers to try out *syngo*.via WebViewer:

- Visit the iTunes AppStore[1] and search for *syngo*.via WebViewer[2]
- Download the app, launch it, and select Demo-server
  or
- Visit www.siemens.com/*syngo*.via-webviewer
- Follow the instructions to access the Demo-server

[1] Apple®, the iPhone®, the iPad®, iPod Touch® are trademarks of Apple Inc., registered in the U.S. and other countries.

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Service

Whether there is an issue pertaining to software, applications, or the IT infrastructure – the Siemens IT Care Plan provides comprehensive, one-stop support, whenever it fits your schedule. The service contract helps to guarantee the mid- and long-term serviceability of the entire *syngo*.via solution, protecting your investment.

>> www.healthcare.siemens.com/services/imaging-therapy/healthcare-customer-services

Service

Efficient service you can count on

Single point of contact

We closely collaborate with our hardware providers. This allows us to significantly speed up the entire service process. For customers, this means that you just need to call Siemens – and we take care of the rest. As our hardware provider is part of our Customer Care Center, tedious clarification processes are a thing of the past. We analyze the hardware issue and forward it along with additional information to our hardware partner, who is then responsible for on-site problem resolution and coordination of the next steps.

Service

Flexible and streamlined support for your administrator

Siemens Remote Service

Siemens Healthcare is one of the world's first manufacturers of medical systems to have implemented an internationally valid information security management system (ISMS) for the remote service of medical devices. The system has been certified by TÜV Süd in Germany in line with ISO 27001. This means that patient data is well protected – and you benefit from fast support whenever needed. The system minimizes the need for lengthy explanations, and virtually eliminates unscheduled system downtime – increasing productivity. And best of all, we have a first-time resolution rate of over 80 percent.

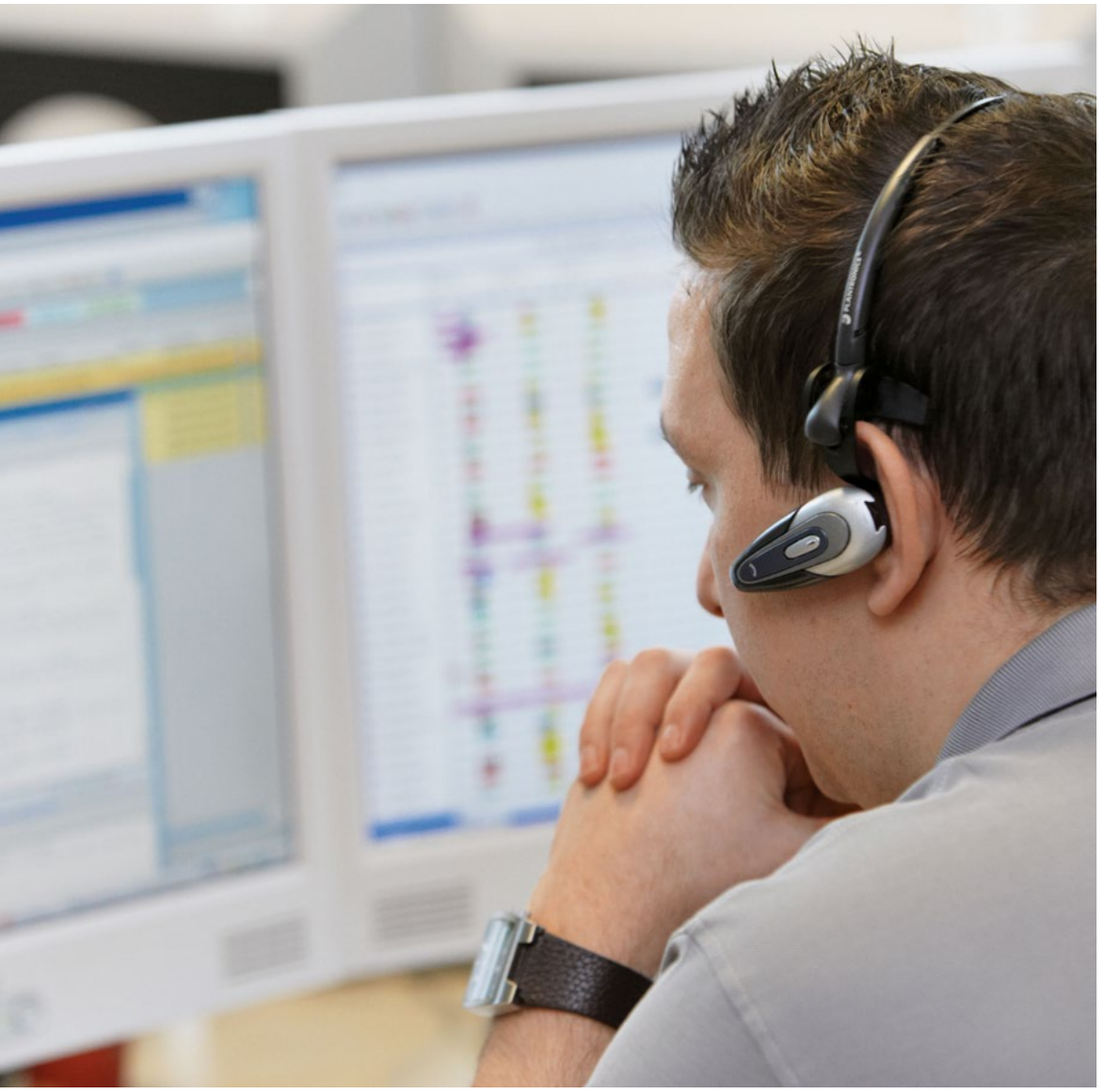
LifeNet *syngo* Information Center

The LifeNet *syngo* Information Center is available worldwide to your registered customer administrators and to the Siemens service and implementation staff. As a knowledge base and first place to go, it provides all the current information you need for your daily work routine with *syngo*.via: e.g. documents like Administration Manuals or System Descriptions or tips and tricks to bring out the best in your *syngo*.via.
If you would like to request an account for the LifeNet *syngo* Information Center, please contact your Customer Care Center or write an email[1] to:
lifenet-infocenter.healthcare@siemens.com

[1] First Name, Name and *syngo*.via serialnumber required

Service

Flexible and streamlined support for your administrator



Ask the Expert sessions

These sessions are usually held three times a year via Webcast. They are designed to provide you with the latest information pertaining to IT administration, such as announcements of new versions. At the end of each session, you have the opportunity to ask questions. IT Care Plan customers automatically receive e-mail invitations to upcoming Ask the Expert sessions.

Siemens IT Care Plan

The comprehensive service contract for *syngo* software products

Clinical benefits

We help you enable a high quality of reports, readings and results by keeping the system up-to-date, available and efficient.

Financial benefits

With the comprehensive features of the Siemens IT Care Plan, we help you keep your *syngo* software up-to-date and running over the entire product lifecycle, protecting your investment.

Workflow benefits

Our experts for your expertise: our team of specialists provides fast and comprehensive support up to 24/7 using the Siemens Remote Service (SRS) infrastructure and features – speeding up your day-to-day work.

Business benefits

Software upgrades help you benefit from the latest innovations. This helps you be a highly competent business providing high-quality diagnoses in a competitive environment.

syngo.via addresses today's challenges

syngo.via adresses today's challenges

***syngo*.via >>**

syngo.via adresses today's challenges

Challenges at hospitals and imaging centers around the world

Hospitals and imaging centers around the world are struggling to adapt to a changing healthcare environment shaped by aging populations, a growing burden of chronic diseases, and the introduction of increasingly expensive treatments. Medical professionals face the task of driving even-higher standards of diagnostic confidence and treatment success – under growing time pressure.

No matter whether you are a **radiologist**, **administrator** or **C-level executive**, and whether you work in a major hospital or a small imaging center, you are confronted with clinical, operational and financial challenges.

And for all these challenges, the answer lies in efficient, flexible, and intelligent software – such as *syngo*.via.

***syngo*.via >>**

syngo.via provides answers for radiologists

In your daily routine, you face a growing number of patients and a vast amount of image data. At the same time, you are confronted with high time pressure and the need to deliver high diagnostic confidence as a basis for sound clinical decisions – while staying on budget. In other words: you need to deliver high productivity and quality in the everyday as well as the not-so-everyday cases. You need rapid and easy access to clinical images, intelligent tools and applications, and an uninterrupted workflow for immediate distribution of images and results.

The *syngo*.via 3D routine and advanced reading solution provides the answers. It helps you accelerate workflows by

- delivering cases ready for reading
- providing intelligent tools and applications for quantitative image reading
- enabling access to cases from anywhere[1]
- supporting efficient generation of reports that are clear and to the point.

With *syngo*.via, you don't just read images – you get the full picture. Efficient. Fast. Intelligent.

[1] Prerequisites include: Internet connection to clinical network, DICOM compliance, meeting of minimum hardware requirements, and adherence to local data security regulations.

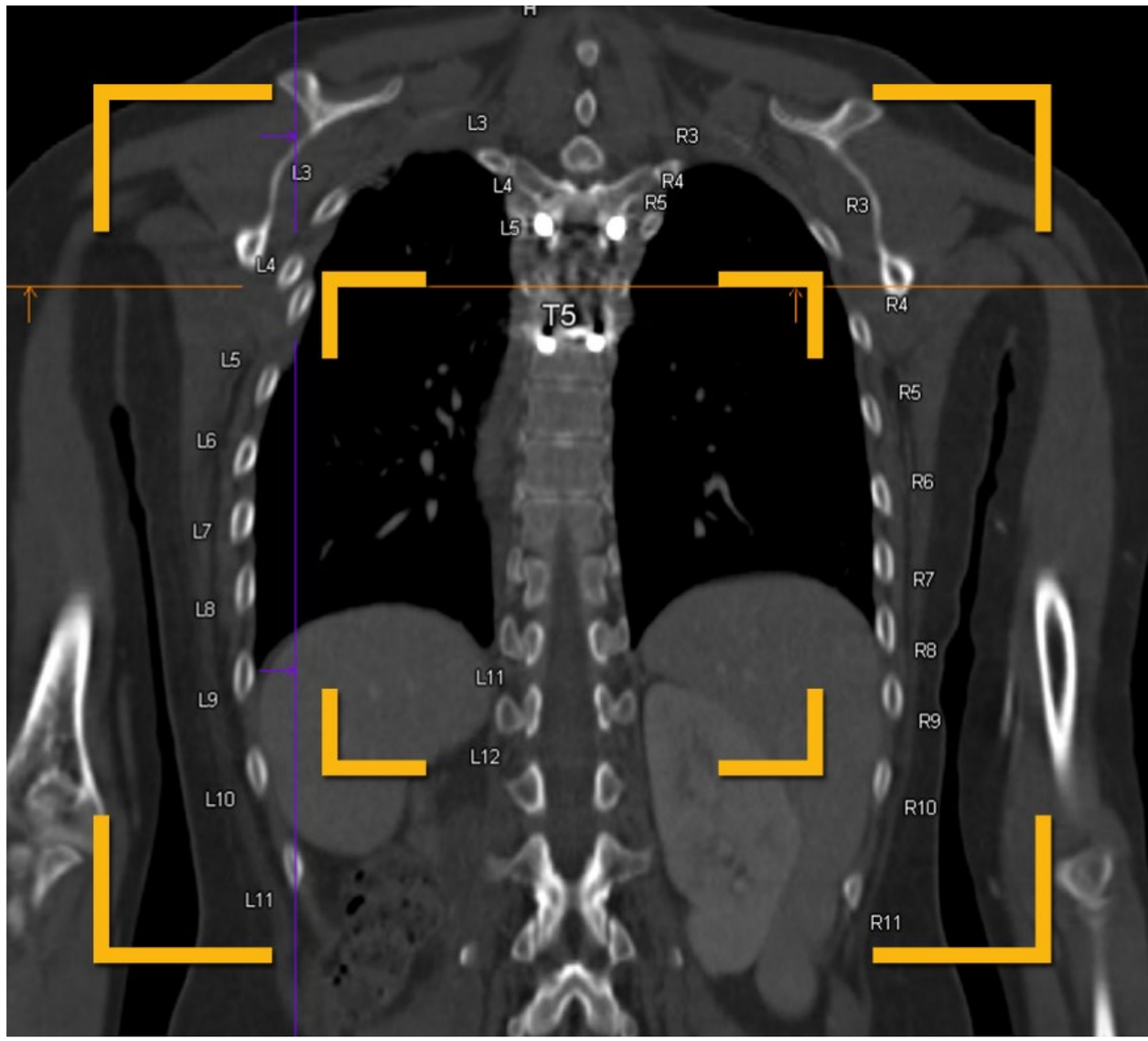
syngo.via provides
answers for radiologists

***syngo*.via >> *syngo*.via addresses today's challenges >> answers for radiologists**

syngo.via provides answers for radiologists

Cases ready for reading

syngo.via provides intelligent and reliable tools for both day-to-day and more challenging cases across all modalities. It automatically pre-processes images, prefetches prior examinations, and recognizes human anatomy – allowing you to focus on the images, the reading, and the evaluation instead of on the preparation. This saves valuable time, and helps ensure consistent result quality.



syngo.via provides answers for radiologists

Anywhere[1] access to cases

syngo.via provides fast and flexible access to multimodality information through floating licenses and its mobile extension *syngo*.via WebViewer[2]. This means that workplaces are not bound to a physical location, but virtually follow you. Whether reading at the office, reporting from the PACS, providing interdepartmental information, discussing results with patients, or even at home, you get rapid access to multimodality information.

[1] Prerequisites include: Internet connection to clinical network, DICOM compliance, meeting of minimum hardware requirements, and adherence to local data security regulations.

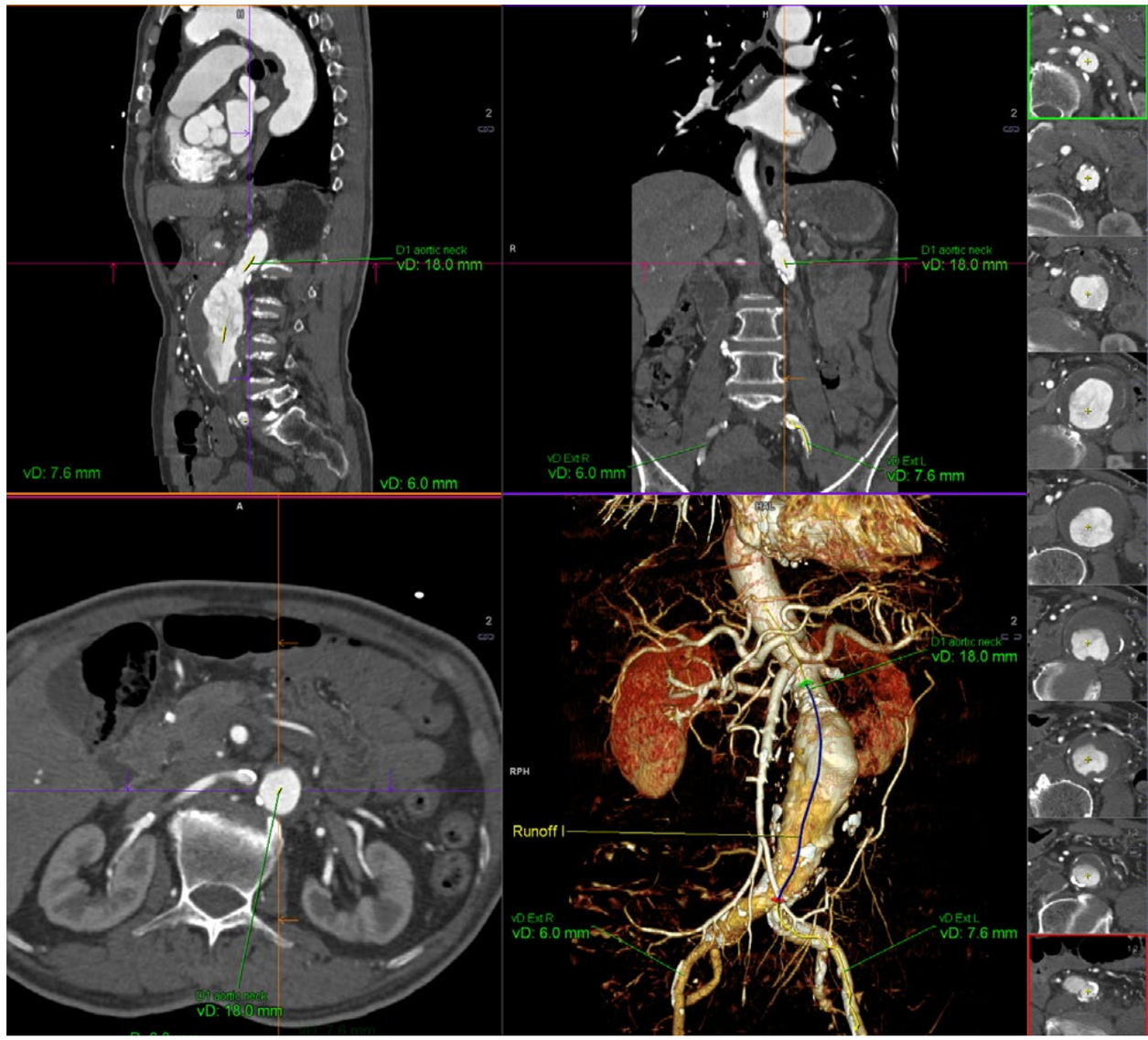
[2] *syngo*.via WebViewer is not for diagnostic viewing/reading on mobile devices. Please refer to your sales representative whether the product is available for your country. Diagnostic reading of images with a web browser requires a medical grade monitor. For iPhone and iPad country specific laws may apply. Please refer to these laws before using for diagnostic reading/viewing.

***syngo*.via >> *syngo*.via addresses today's challenges >> answers for radiologists**

syngo.via provides answers for radiologists

Intelligent tools and applications for quantitative image reading

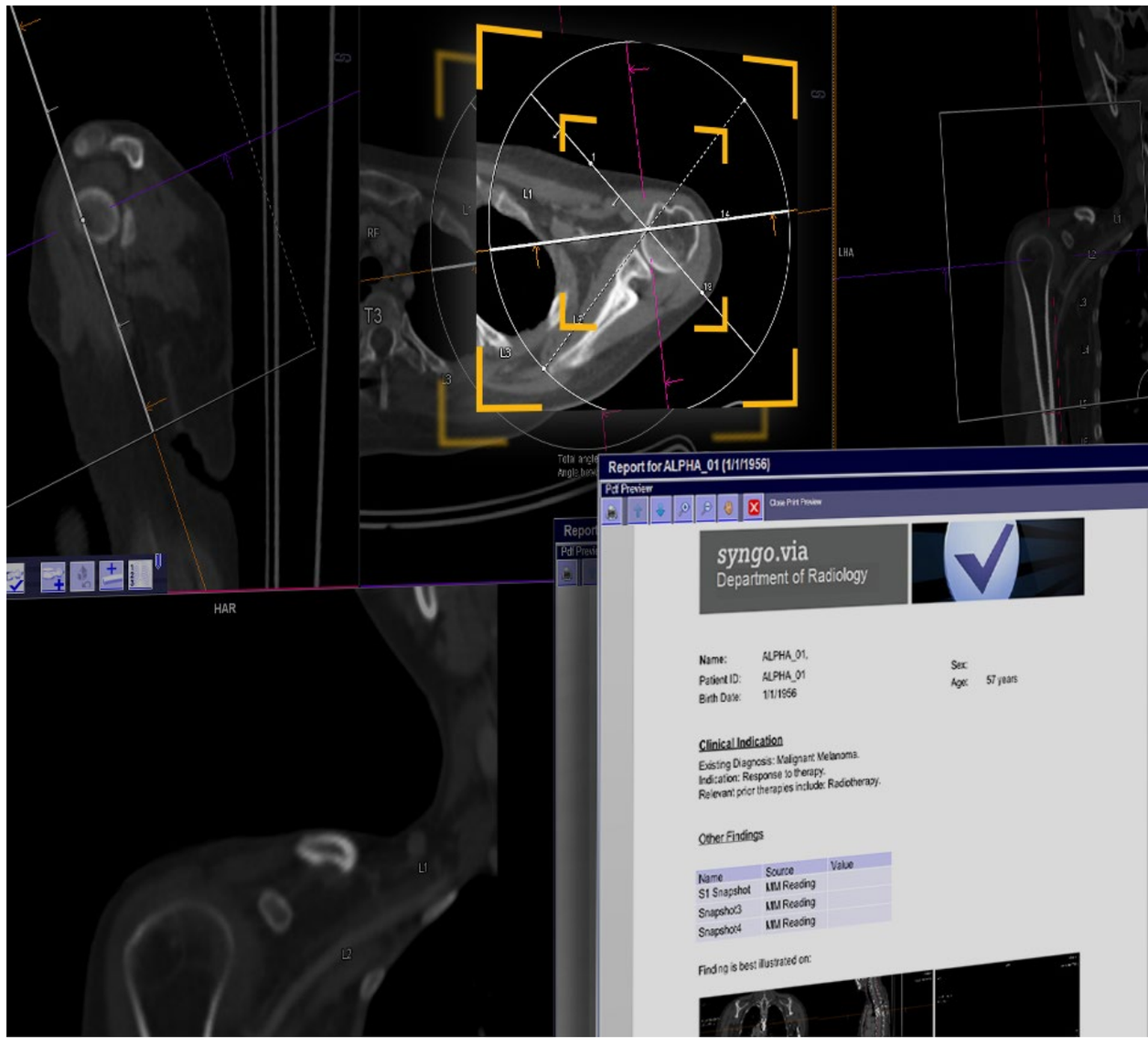
syngo.via guides you through the entire reading workflow and offers powerful applications for case analysis – including intelligent and easy-to-use tools for reliable quantification of findings. This helps you boost efficiency without compromising on diagnostic confidence.



syngo.via provides answers for radiologists

Efficient generation of high-quality reports

syngo.via enables you to efficiently navigate and manage all findings, and integrate them into a single document structured to meet your referrers' needs. Thanks to *syngo*.via advanced reporting functionality, creating an overview of all important findings, including key images and graphics, is quick and simple.



syngo.via provides answers for radiologists

»The new *syngo*.via proves that *syngo*.via keeps up with the fast evolving pace of medical technology. New features like anatomical intelligence will make my life and the life of my techs easier.«

Dr. Martijn Grieten
Ziekenhuis Oost-Limburg Genk,
Belgium

syngo.via provides answers for C-level executives

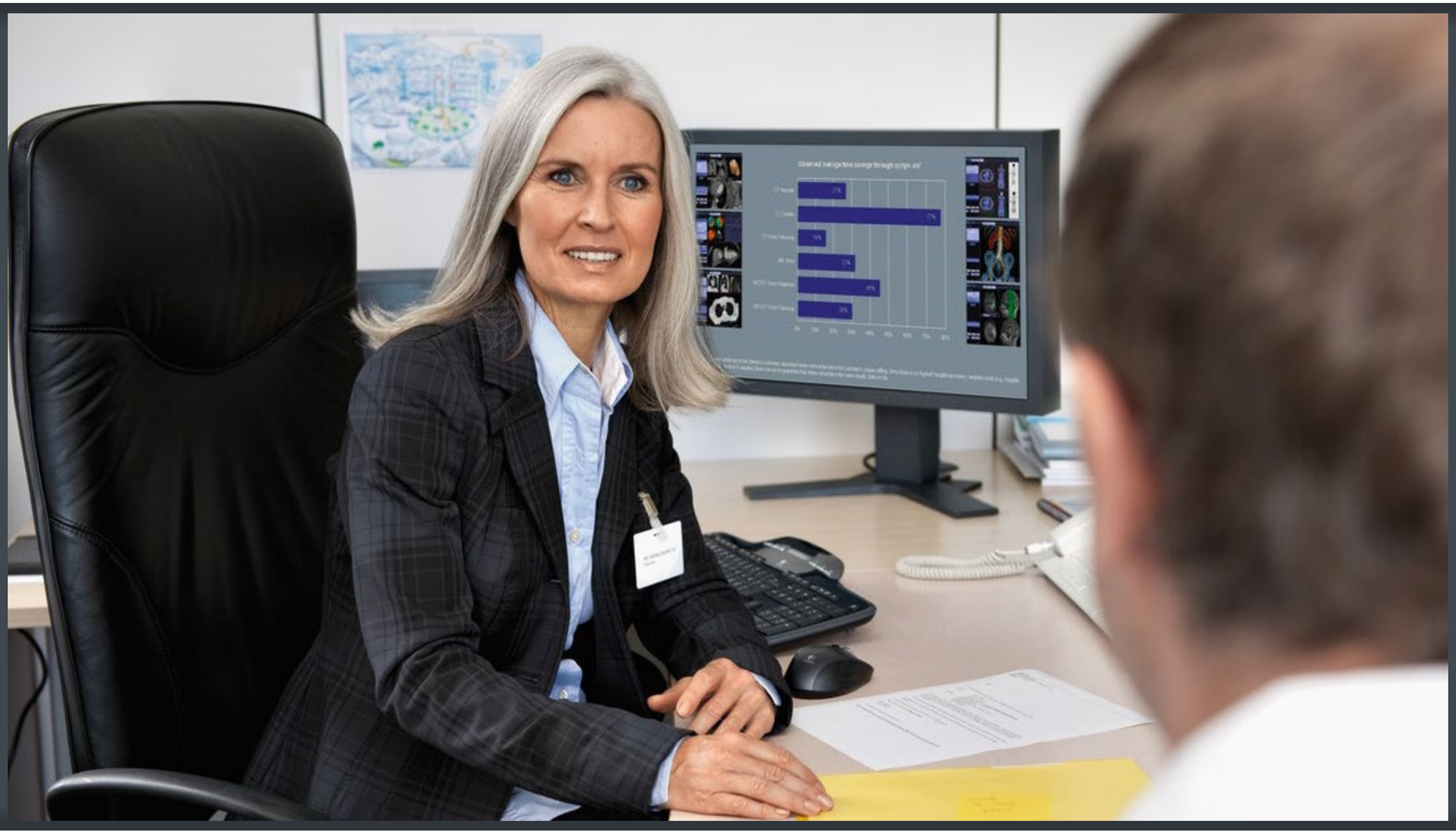
Against the background of reimbursement cuts, challenged economies, and changing legislative environments, healthcare providers face a variety of financial questions, and are under pressure to increase efficiency and improve quality of care. In addition, they may also struggle with foreseeing their future clinical and business needs.

The answer to these challenges lies in efficient, flexible, and intelligent software, such as *syngo*.via, that enables you to

- increase efficiency across the clinical organization
- tailor the solution to suit the needs of your medical facility – today and tomorrow
- secure your business processes.

Let *syngo*.via help you keep pace with changing healthcare environments.

syngo.via provides
answers for C-level executives

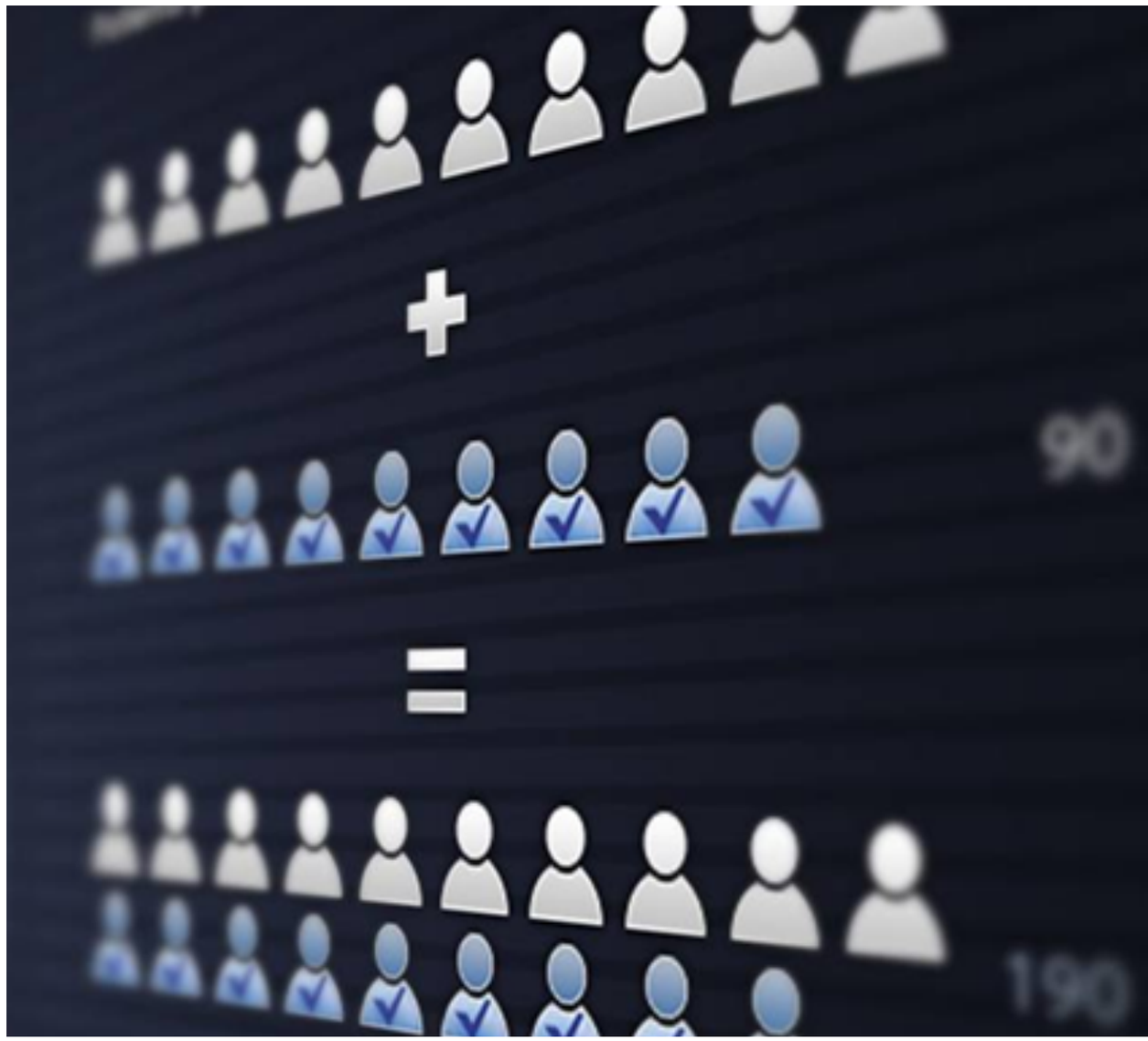


***syngo*.via >> *syngo*.via addresses today's challenges >> answers for C-level executives**

syngo.via provides answers for C-level executives

Increasing efficiency without compromising on patient care

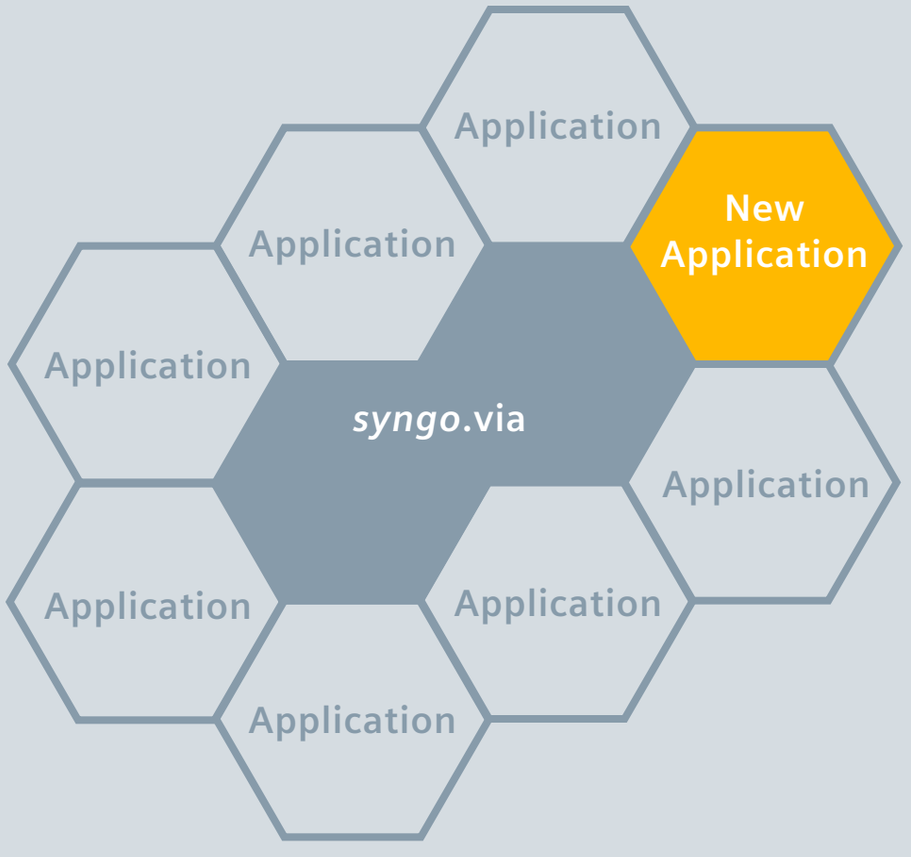
Efficiency is one of the key challenges in healthcare today. This is why we integrated into *syngo*.via what matters most to our users: intelligence. The software automates many steps in case preparation, accelerating technologists' and radiologists' work. Intelligent tools and applications enable high-quality case evaluations. Plus user interfaces and the user experience are aligned across applications. Your benefits? Less training effort, faster radiology workflows, and patient-centric productivity gains – without compromising on patient care.



syngo.via provides answers for C-level executives

A modular, multimodality solution to suit your needs

With *syngo*.via Element, *syngo*.via Workstation and *syngo*.via Server, Siemens offers customers full flexibility in *syngo*.via configurations – whether they are based at a specialized practice or a major research hospital. *syngo*.via is a modular solution with a broad range of applications, from routine to advanced. Innovative reading functionality for various clinical fields and modalities comes as standard. A variety of optional clinical applications then allows you to tailor *syngo*.via to your workflow requirements, installed modalities and clinical focus – for today and tomorrow.



syngo.via provides
answers for C-level executives

Securing your business processes

With a Siemens IT Care Plan service agreement, we help you keep your *syngo* software up-to-date and running over the entire product lifecycle, protecting your investment and helping secure your business processes. Our team of specialists provides fast and comprehensive support up to 24/7 using the Siemens Remote Service infrastructure and features, whenever it fits your schedule. And last but not least, with a Siemens IT Care plan you are entitled to the latest software upgrades, so you can stay competitive and up-to-date. In short: you can count on us.

syngo.via provides
answers for C-level executives

»*syngo*.via made us far more efficient: We don’t need as many technologists to create the images we need to evaluate as radiologists. We dedicate fewer radiologists’ time per interpretation, yet find that we are in fact more accurate and precise in our interpretation.«

Stephen M. Bravo, M.D.
Medical Director Sand Lake Imaging,
Orlando, FL, USA

syngo.via provides answers for administrators

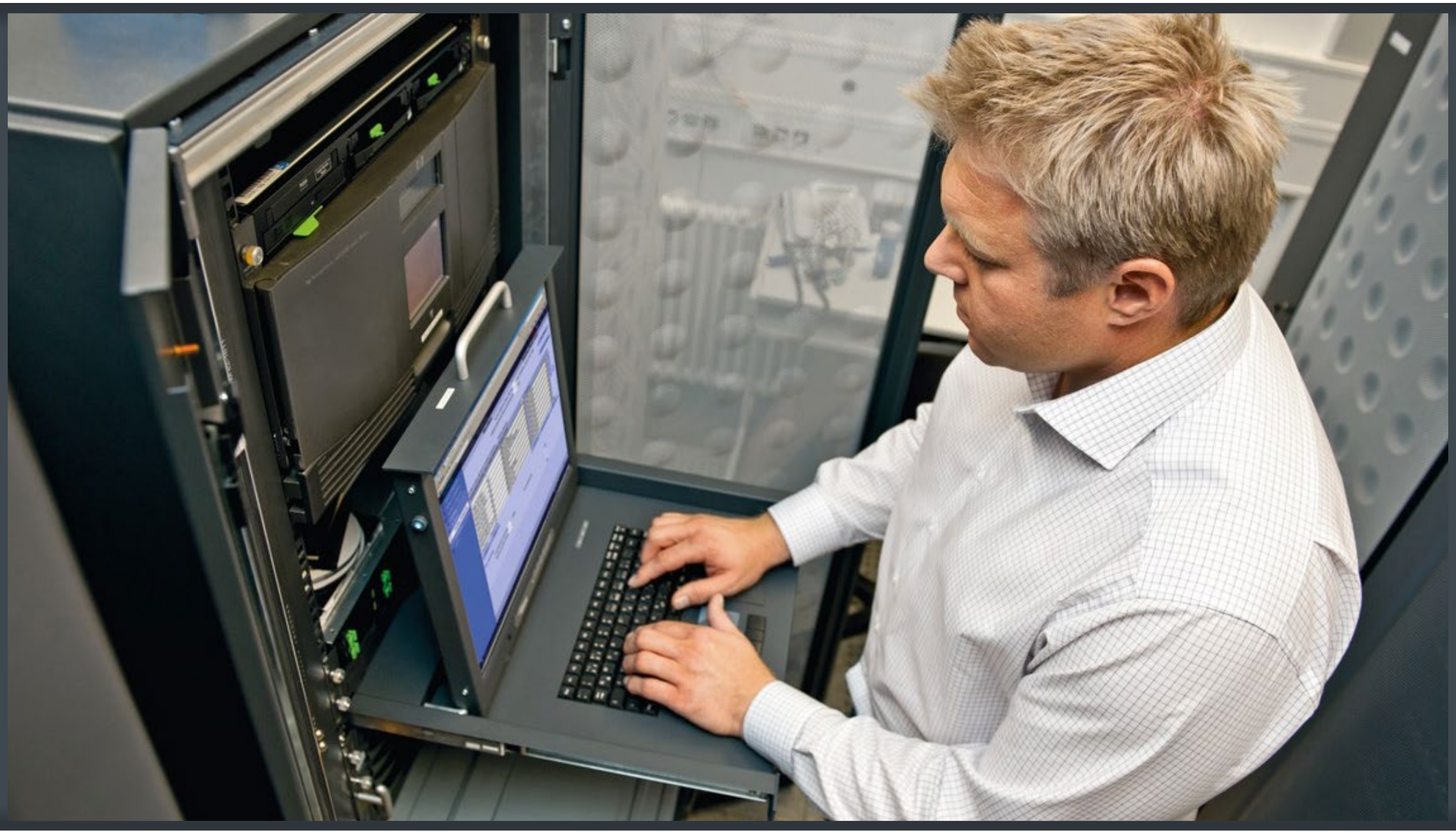
Today's IT and clinical administrators have a tremendous responsibility when it comes to managing the IT infrastructure and the workflows of a radiology facility. These facilities are typically equipped with more than one information system, operate multiple imaging modalities and a PACS, and are part of a complex enterprise IT infrastructure. Reading software that does not smoothly integrate into this environment or is difficult to service slows down clinical workflows and poses operational and financial challenges to administrators and the entire organization.

The answer lies in software such as *syngo*.via that offers

- rapid access to multimodality information
- seamless integration with imaging hardware, RIS and PACS
- centralized system access for administrative tasks
- access to flexible and streamlined support

Let imaging hardware and IT become one – within the hospital and beyond.

syngo.via provides
answers for administrators



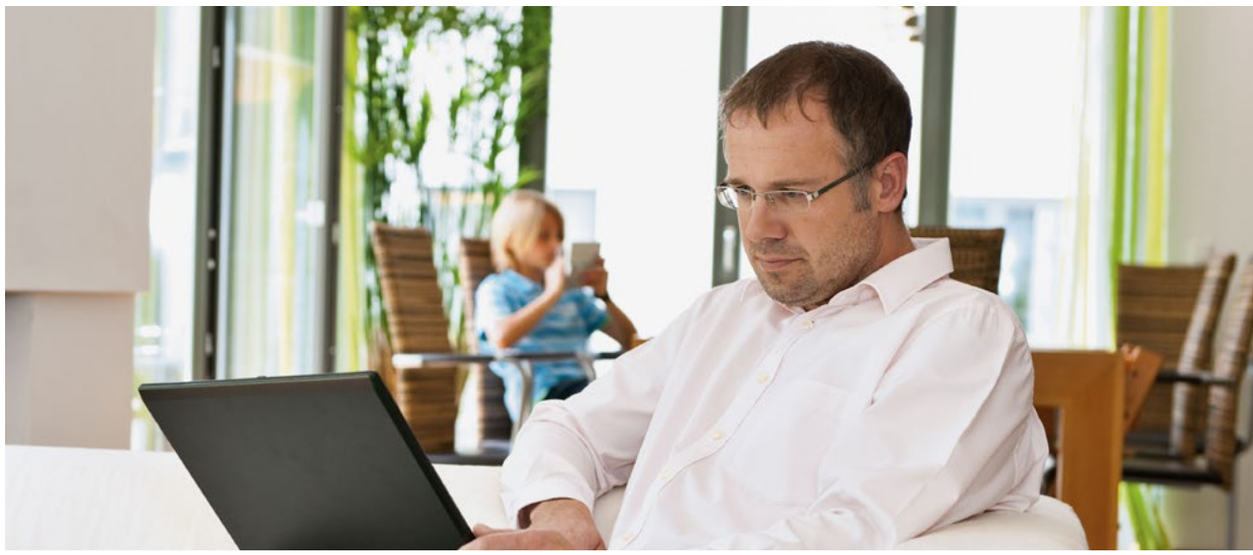
***syngo*.via >> *syngo*.via addresses today's challenges >> answers for administrators**

syngo.via provides answers for administrators

Rapid access to multimodality information within existing infrastructure

syngo.via is based on a client-server architecture: the server processes and renders the data from the connected imaging hardware, while the client provides the user interface. The *syngo*.via client can access multiple servers[1].
Your benefits? You can re-use existing client hardware[2], and users can log on from any computer in the network – inside or outside the department[3] – to take advantage of fast, interactive reading. Moreover, *syngo*.via applications can be launched from your existing PACS and RIS, ensuring fast and flexible access to multimodality information.

[1] The version of server and *syngo*.via client must match.
[2] If minimum hardware and operating system requirements are met.
[3] Prerequisites include: internet connection to clinical network, DICOM compliance, meeting of minimum hardware requirements and adherence to local data security regulations.



syngo.via provides answers for administrators

Seamless integration with modalities, RIS and PACS

Seamlessly networked workplaces are a must for efficiency. *syngo*.via tightly integrates imaging modalities and IT, making it simple to access and share information. As it uses the DICOM and HL7 industry standards, *syngo*.via can be easily connected to your HIS/RIS, PACS, printers, cameras, and modalities, regardless of vendor – and provides a standard interface for image call-up from third-party RIS/PACS and HIS clients. Furthermore, *syngo*.via conforms with the internationally recognized IHE Framework[1] for streamlined systems integration in multi-vendor environments.

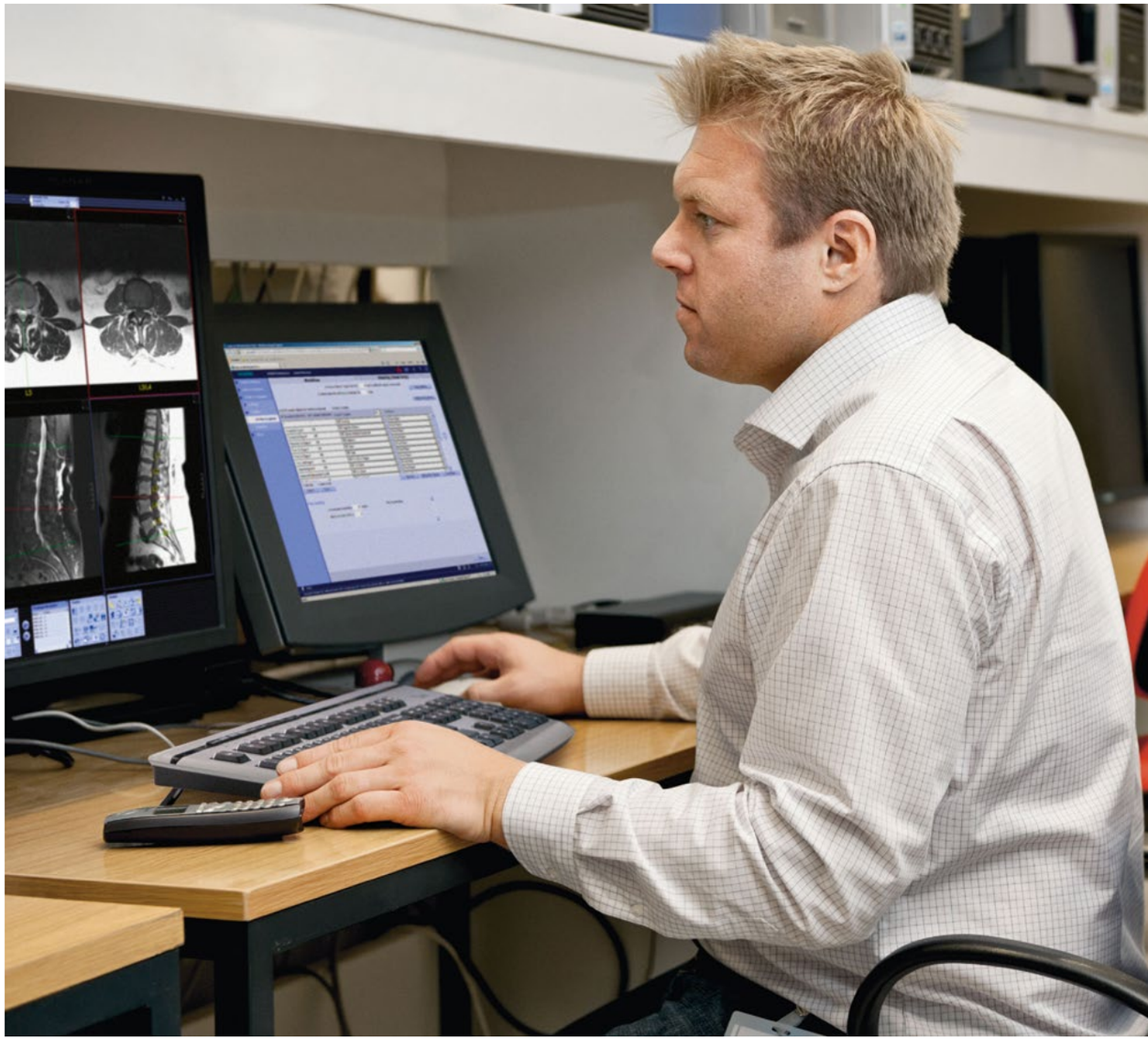
[1] Integrating the Healthcare Enterprise

syngo.via provides answers for administrators

Centralized system access for administrative tasks[1]

To help expedite configuration and enable proactive maintenance and troubleshooting, *syngo*.via includes a dedicated Administration Portal. It is easy to use and includes a comprehensive set of tools for status monitoring, configuration, and software updates. And as the *syngo*.via Administration Portal is web-based, clinical administrators, IT administrators, and service personnel benefit from centralized system access – no matter where they are[1].

[1] Prerequisites include: connection to clinical network and the *syngo*.via server, appropriate access rights.



syngo.via provides answers for administrators

Access to flexible and streamlined support

With the comprehensive Siemens IT Care Plan, we help you to keep your Siemens *syngo* software up-to-date and running. Furthermore, with Siemens Remote Service you can take advantage from fast and professional support for software and related hardware components whenever needed.

Registered customer administrators additionally benefit from easy access to the LifeNet *syngo* Information Center. As a document repository, knowledge base and first place to go, it provides the current information you need: technical documentation and information, useful news, tips and tricks.

syngo.via provides
answers for administrators

»I very much appreciate the ability of installing updates myself. This allows us to benefit from new features early on and to flexibly schedule the installation in order to minimize interference with the daily routine in our imaging center.«

Dr. Alexander Klemm, radprax, Wuppertal, Germany

Modalities

Computed Tomography

SOMATOM scanners and the CT Clinical Engines and applications powered by *syngo*.via deliver the highest level of clinical excellence. A wide variety of valuable applications are available helping to answer the most critical clinical questions in diagnostic CT imaging.

>> go to Applications

>> go to Winning Combination

www.siemens.com/*syngo*.via-ct

Computed Tomography
Introduction

Today's reality

Better healthcare for all patients is a key priority for the entire medical industry. But the realities of clinical practice often make this simple-to-understand goal quite difficult to realize: staying within budgets, reducing hospital stays, speeding up time to diagnosis, and dealing with personnel issues, while maintaining high clinical standards and throughput. At the same time, patients demand accurate and faster results.

Computed Tomography
Introduction

Our approach

Siemens plays an active role in addressing these challenges. Right from the earliest stages of research, product development, and design, we listen to the advice and recommendations of external medical experts – and align our focus with the needs and demands of our end users. Over the years, this has led to us concentrating our efforts in four key areas:

- Pioneer technological and medical advancement
- Maximize workflow efficiency
- Make state-of-the-art CT affordable
- Set the standard in customer care

Our vision

As a trusted partner to our customers, we create CT innovations that take clinical practice to the next level of excellence – and enable access to better patient care. We believe in pushing the boundaries of the possible, and that a commitment to improving healthcare can overcome technical obstacles. This visionary approach, backed up by Siemens largest R&D budget in the healthcare industry, has made Siemens the acknowledged innovation leader in recent decades. And our talented global team continues to set the pace in an ever-changing environment, providing Answers for Life.

Computed Tomography
Introduction

Modalities and IT become one

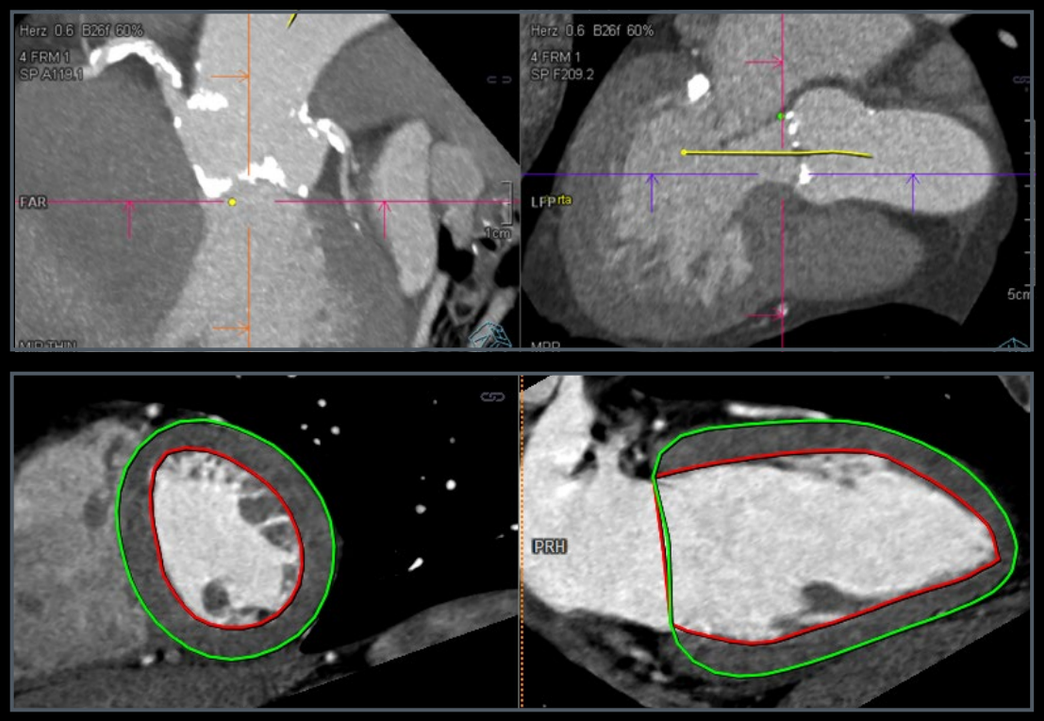
Siemens has taken the next step in imaging software and workstation technology. *syngo*.via[1] connects to RIS/PACS and modalities of all major vendors. Whether at a workstation, in another department, in the office or even at home[2], you benefit from leading-edge client-server technology and enjoy rapid access to multimodality data. Instant data streaming allows for a faster modality connection, and thus faster availability of images. Whether for clinical demonstrations or efficient collaboration with referring physicians, you can navigate through findings with a single click and share information in a structured report format.

[1] *syngo*.via can be used as a stand-alone device or together with a variety of *syngo*.via-based software options, which are medical devices on their own right. *syngo*.via and the *syngo*.via based software options are not commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

[2] Prerequisites include: Internet connection to clinical network, DICOM compliance, meeting of minimum hardware requirements, and adherence to local data security regulations.

Computed Tomography
Cardio-Vascular Engine

The CT Cardio-Vascular Engine is a fine-tuned bundle that combines most innovative scanner features for superior specificity and highly advanced software applications for speed in routine. The CT Cardio-Vascular Engine helps accelerate the automated anatomical evaluation, quantification, and functional assessment of CT angiography images – while allowing manual interaction for challenging cases at any time.



syngo.CT Cardio-Vascular Engine

- *syngo*.CT Calcium Scoring
- *syngo*.CT Cardiac Function
- *syngo*.CT Coronary Analysis
- *syngo*.CT Vascular Analysis

syngo.CT Cardio-Vascular Engine Pro

- *syngo*.CT Cardiac Function – Enhancement
- *syngo*.CT Cardiac Function – Right Ventricle
- *syngo*.CT Vascular Analysis – Autotracer
- *syngo*.CT Rapid Stent Planning

Computed Tomography
Cardio-Vascular Applications

syngo.CT Cardiac Function
This application allows you to read and diagnose CT images of the heart in order to evaluate left ventricular function. As a result, it is now possible to complete a full cardiac assessment in less than four minutes[1].

syngo.CT Cardiac Function – Enhancement
An extension of the CT Cardiac Function, this feature facilitates visualization of hypodense and/or hyperdense myocardial areas for CT datasets generated by Single Energy CT.

syngo.CT Cardiac Function – Right Ventricle
This optional feature of CT Cardiac Function allows you to read and diagnose CT images of the heart in order to evaluate right ventricular function.

syngo.CT Cardiac Function – Valve Pilot
This extension of the CT Cardiac Function assists in pre-procedural TAVI planning exams. It automatically finds the annular plane and provides minimum, maximum, and effective diameters of the aortic annulus.

syngo.CT Calcium Scoring
This workflow step quantifies coronary calcifications (mass, volume, Agatston score) and calculates the patient's coronary age. During the evaluation, the patient's score is compared to the scores of a healthy reference group, e.g. the MESA study.

syngo.CT Coronary Analysis
This function provides a cardiac-specific set of automatic pre-processing steps and display functions, in order to rapidly and reliably evaluate and quantify angiography images of the coronary arteries – making it possible to rule out coronary artery disease in less than a minute[1].

syngo.CT PE CAD
This function supports triple rule-out examinations by detecting pulmonary lesions. A dedicated overview layout displays all possible findings and makes it easier for the user to confirm or rule out the existence of a pulmonary embolus.

syngo.CT Rapid Stent Planning[1]
NEW

This new application enables automatic completion of manufacturer-specific stent order forms. It is an ideal extension for Rapid Results Technology: dedicated protocols guide the user through all length and diameter measurements, and the dimensions are automatically stored in the corresponding order form.

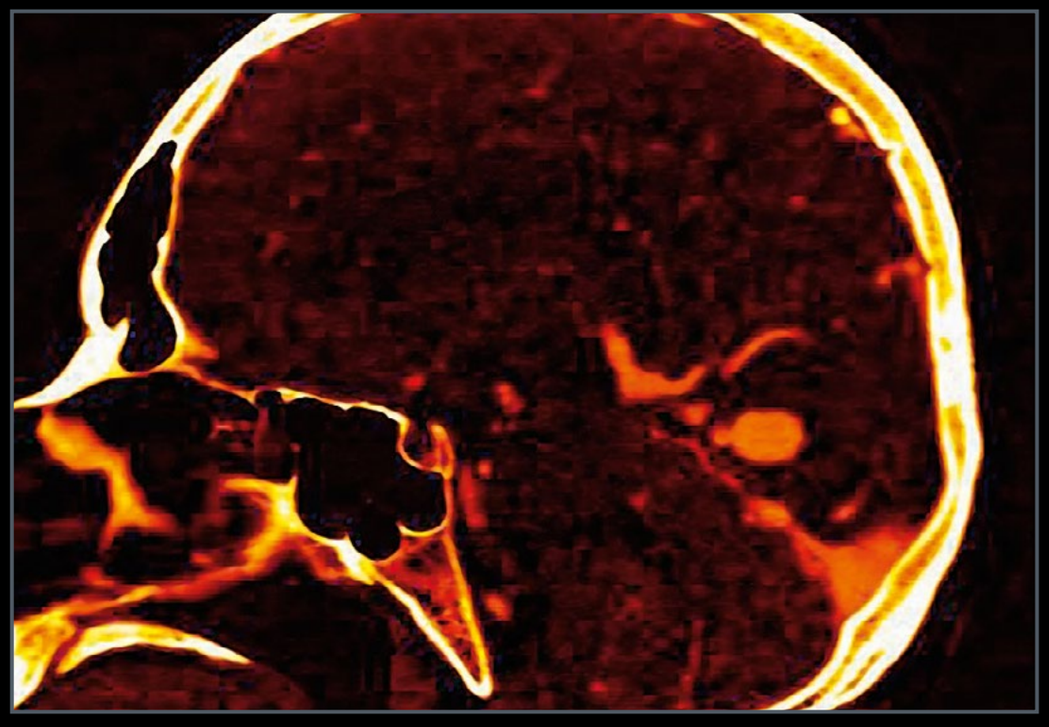
syngo.CT Vascular Analysis
This function allows physicians to automatically evaluate and quantify angiography images of the general vessels. It provides a vascular-specific set of auto pre-processing steps and display functions.

syngo.CT Vascular Analysis – Autotracer
This optional feature of CT Vascular Analysis supports automatic vessel centerline extraction and anatomical labeling of the main vessels, even before the case is opened for review.

[1] The product is not commercially available in the U.S.

Computed Tomography
Dual Energy CT

With Dual Energy CT you can obtain another level of diagnostics with your CT scanner. Functional and quantitative evidence adds deeper diagnostic confidence to your daily clinical routine. With the *syngo*.via Dual Energy applications, you have a powerful partner for enhancing your daily work – and going even further than you expect.



syngo.CT DE Advanced Package

- *syngo*.CT DE Direct Angio
- *syngo*.CT DE Lung Analysis
- *syngo*.CT DE Calculi Characterization
- *syngo*.CT DE Brain Hemorrhage
- *syngo*.CT DE Heart PBV
- *syngo*.CT DE Virtual Unenhanced
- *syngo*.CT DE Gout
- *syngo*.CT DE Monoenergetic Plus
- *syngo*.CT DE Bone Marrow

Computed Tomography
Dual Energy Applications

syngo.CT DE Bone Marrow[1]

NEW

Allows for segmentation and visualization (color-coding) of bone marrow based on material decomposition into bone marrow and calcium. This application can be used for Dual Source and single source data sets.

syngo.CT DE Brain Hemorrhage

Makes it possible to differentiate older hemorrhages that are visible in the virtual non-contrast image from new hemorrhages, which are the only ones to remain visible in the iodine image.

syngo.CT DE Calculi Characterization

Is an application for characterizing kidney stones. Basis for this approach is a material decomposition into uric acid and other stone types.

syngo.CT DE Direct Angio

Makes it possible to directly subtract bone even in complicated anatomical regions by a single click.

syngo.CT DE Gout

Uses automatic color coding to visualize deposits of uric acid crystals (tophi) in peripheral extremities, overcoming limitations of conventional methods by being non-invasive, accurate, and fast.

syngo.CT DE Heart PBV

Visualizes and quantifies contrast agent concentration in the myocardium to reveal perfusion defects.

syngo.CT DE Lung Analysis

Combines former apps Lung PBV and Lung Vessels in one application for advanced lung analysis. Functional assessment of the lung and quantitative assessment of the lung vessels can be achieved simultaneously to get an immediate overview on the whole diagnostic information.

syngo.CT DE Monoenergetic Plus[1]

NEW

syngo.CT DE Monoenergetic Plus[1] offers a new algorithm for enhanced image quality and iodine contrast. It shows monoenergetic images ranging from 40–190 keV. Multiple monoenergetic ROIs and the associated absorption curves facilitate comparison and quantification of lesions and tissues.

syngo.CT DE Virtual Unenhanced

Uses Dual Energy information to subtract the contrast medium out of the enhanced CT image. The resulting image helps to characterize liver and kidney lesions, enabling a faster and more reliable diagnosis.

[1] The product is not commercially available in the U.S.

Computed Tomography
Neurology Engine

The CT Clinical Engines advance diagnostic possibilities, supporting a better understanding of diseases and helping you make the right treatment decisions faster.

The 2014 Edition focuses on stroke. The CT Neuro Engine offers a complete diagnostic stroke solution for *syngo*.via.

syngo.CT Neuro Engine

- *syngo*.CT Neuro DSA
- *syngo*.CT Neuro Perfusion

syngo.CT Neuro Engine Pro

- *syngo*.CT Dynamic Angio

Computed Tomography
Neurology Applications

syngo.CT Dynamic Angio

This application assists in the inspection of time-resolved CT images reconstructed from dynamic CT data. Plus, it supports visualization of vessel enhancement over time and can be used to create CT volumes of the arterial or venous phase, for example.

syngo.CT Neuro Perfusion

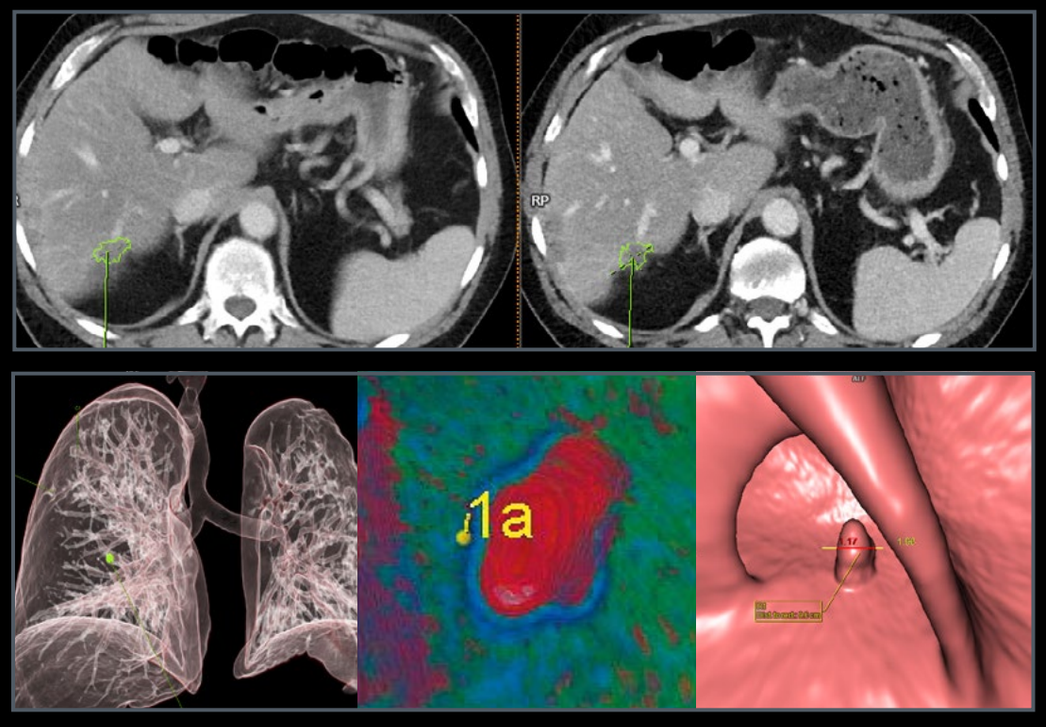
This application visualizes blood perfusion in the brain. In the case of ischemic stroke, it can help estimate the size of the core infarct and the extent of tissue at risk of infarction (penumbra) that could potentially be salvaged with further treatment.

syngo.CT Neuro DSA (Digital Subtraction Angiography)

This dedicated post-processing application allows you to remove bone structures from CT Angiography (CTA) data sets in order to improve visualization of the cerebral vasculature. This enhances visualization of vascular structures in the area of the skull base and helps to delineate aneurysms and other vascular diseases.

Computed Tomography
Oncology Engine

With the CT Oncology Engine you can easily refer to multimodality and Dual Energy images as well as findings made at any previous point in time. Automated measurements and comparisons help you quantify suspicious lesions and provide a sound basis for further medical action. Especially when it comes to follow-up assessment, you will appreciate having all results from previous exams at hand so that you can compare them with current findings and combine all available information into one holistic picture.



syngo.CT Oncology Engine

- *syngo*.CT Segmentation
- *syngo*.PET&CT Cross-Timepoint Evaluation
- *syngo*.CT Colonography

syngo.CT Oncology Engine Pro

- *syngo*.CT Lung CAD
- *syngo*.CT Colonography – PEV
- *syngo*.CT Colonography – Advanced
- *syngo*.PET&CT Onco Multi-Timepoint

Computed Tomography
Oncology Applications

syngo.CT Body Perfusion[1]

NEW

This application allows the quantitative evaluation of dynamic CT data of organs and tumors following the injection of contrast media. By providing images of blood flow, blood volume and permeability, *syngo*.CT Body Perfusion[1] supports the assessment of perfusion disturbances and of perfusion changes during therapy.

syngo.CT Bone Reading

This application provides specific visualization for diagnostic bone assessment in radiological CT datasets. The spine and ribs are displayed in one plane, while interactive functionality allows you to scroll and rotate images – supporting efficient assessment of the complete anatomy.

syngo.CT Colonography

This application combines the advantages of 2D and 3D reading strategies. Flexible screen layouts and dual-monitor support allow you to instantly switch between the 3D endoscopic view and the corresponding 2D images.

syngo.CT Colonography – Advanced

Using the Polyp Lens, this application visualizes CT values beyond the surface of the virtual endoscopic display. Color coding of tagged fecal residue allows you to distinguish potential polyps from stool. Virtual Dissection provides an advanced visualization which unfolds the colon so that the mucosal surface is displayed in one plane.

syngo.CT Colonography – PEV

This application enables automated offline preprocessing of images sent from the CT scanner to the *syngo*.via server. The PEV algorithm automatically reads prone and supine studies consecutively, and delivers high sensitivity with a low rate of false positive findings.

syngo.CT Liver Analysis[1]

NEW

syngo.CT Liver Analysis[1] offers preprocessed segmentation results and intuitive workflow guidance for in-depth analysis of vascular supply areas of the liver. In addition, it facilitates creation of virtual resection planes and calculation of residual liver volume after partial liver resection.

Computed Tomography
Oncology Applications

syngo.CT Lung CAD
This computer-aided detection tool is designed to assist radiologists in the detection of solid pulmonary nodules when reviewing CT examinations of the chest. All *syngo*.CT Lung CAD findings are stored in the *syngo*.via Findings Navigator.

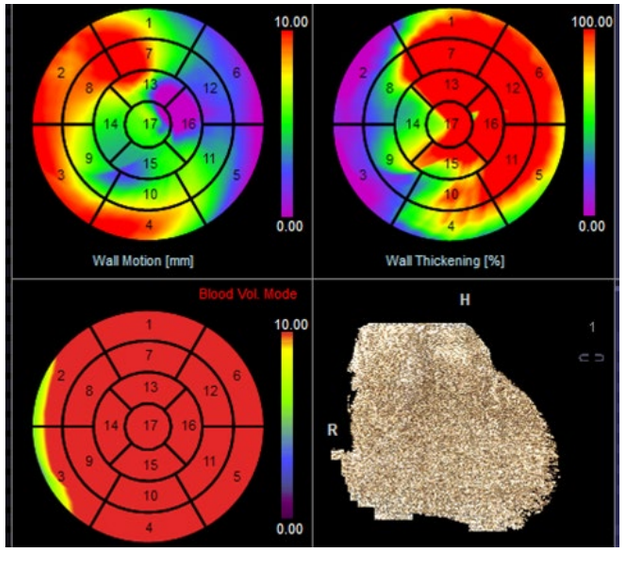
syngo.CT Onco Function – Hepatic AEF
syngo.CT Onco Function – Hepatic AEF provides a dedicated color coded visualization of arterial enhancement fraction (AEF) values calculated from routine abdominal multiphase CT. Enables assessment of hepatic arterial perfusion ratio compared to the total perfusion.

syngo.CT Pulmo 3D
syngo.CT Pulmo 3D utilizes unenhanced (native) CT chest scans for clinical assessment and therapy monitoring of lung diseases like COPD (Chronic Obstructive Pulmonary Disease), fibrosis, and bronchiectasia. Based on the user's preference, the application provides different automated 3D quantifications for the assessment of emphysema and lung airways.

syngo.CT Segmentation
This application provides advanced features for faster, simpler oncological reading. It supports the automated segmentation and evaluation of lesions in the lungs, liver, lymph nodes and other organs – providing standardized quantification in RECIST (1.0 & 1.1), WHO and volume as well as Choi criteria and Advanced HU Statistics.

syngo.PET&CT Cross-Timepoint Evaluation
This application allows you to assess changes in tumor activity and size across four points in time, by comparing quantitative analysis of volume, RECIST, WHO, and minimum, average and maximum functional uptake.

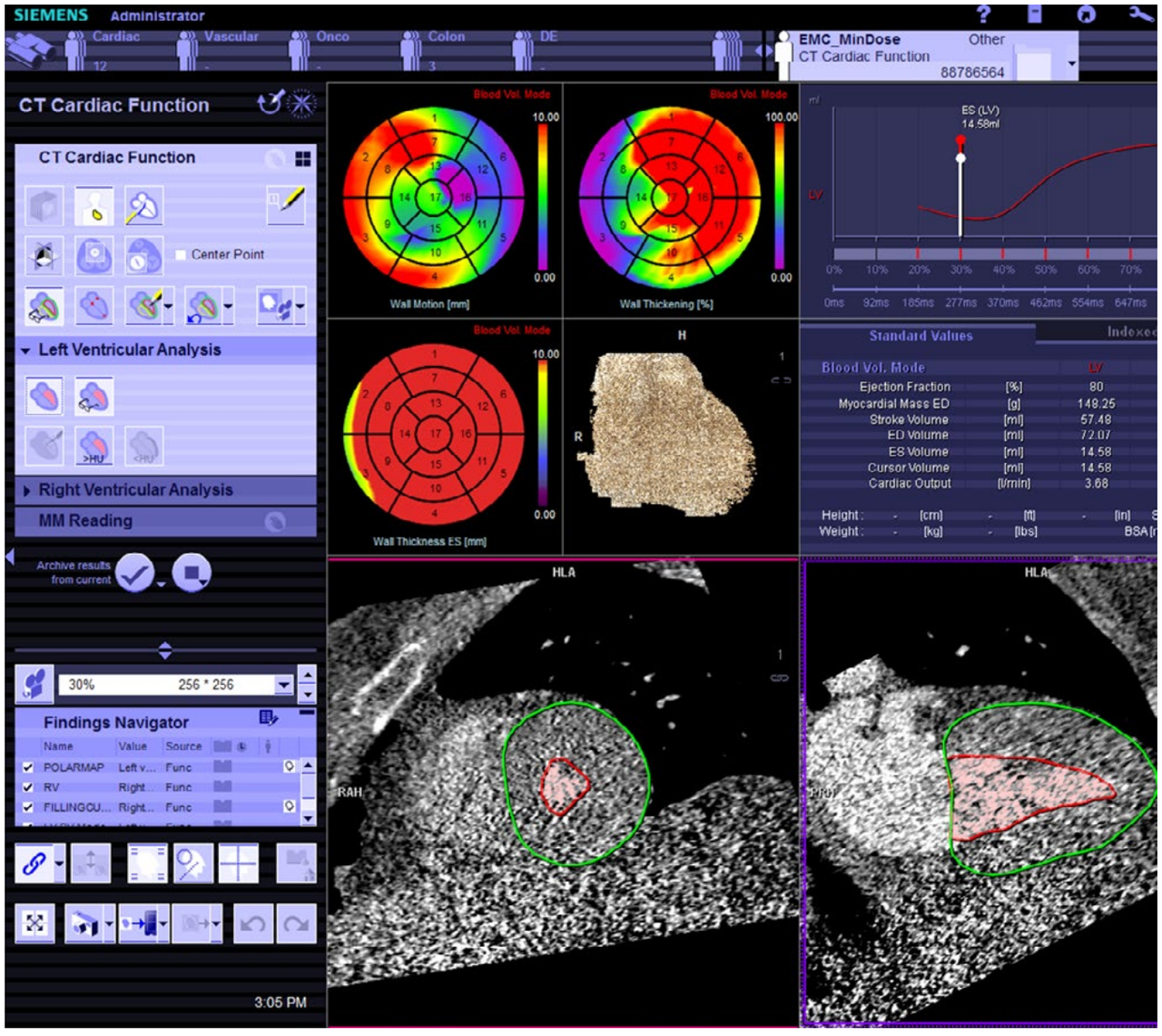
Computed Tomography
Winning Combination



Efficient cardiac exams in line with the ALARA principle

Reducing patients' radiation dose in line with the **ALARA (As Low As Reasonably Achievable)** principle is a key imperative. However, low exposure cannot come at the expense of image quality. When used together with *syngo*.via software, **SOMATOM Definition CT scanners** help reduce radiation dose for cardiac exams without sacrificing reading efficiency or diagnostic confidence.

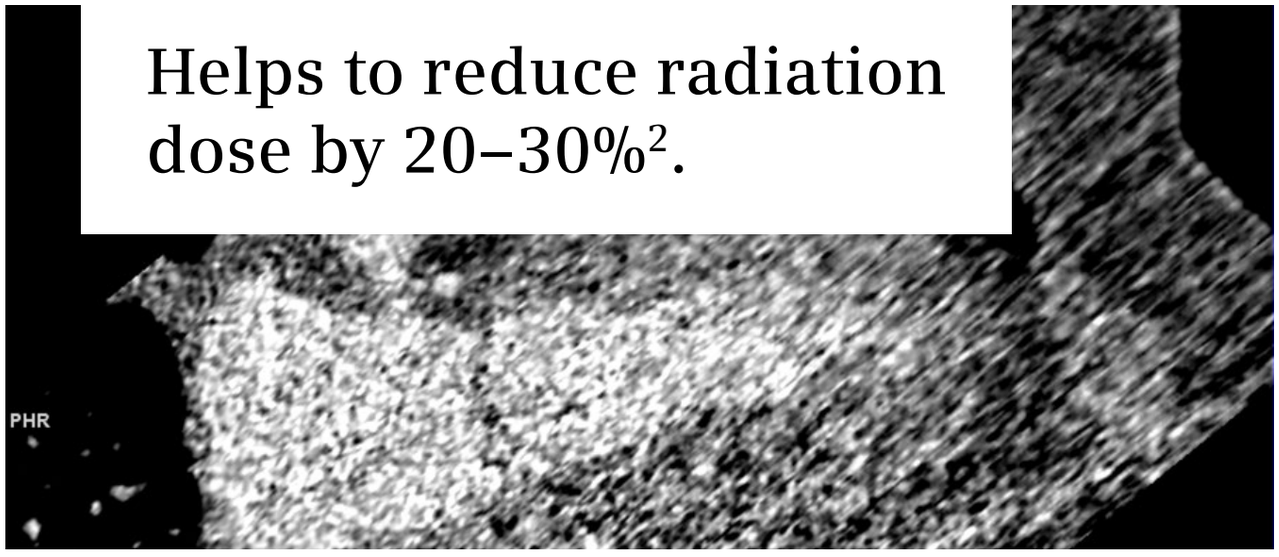
Computed Tomography
Winning Combination



SOMATOM Definition together with *syngo*.CT Cardiac Function

The winning combination of the SOMATOM Definition CT scanners or the SOMATOM Force and the *syngo*.CT Cardiac Function application enables radiologists to make a confident diagnosis on the basis of low-dose images – quickly and efficiently.

Computed Tomography
Winning Combination

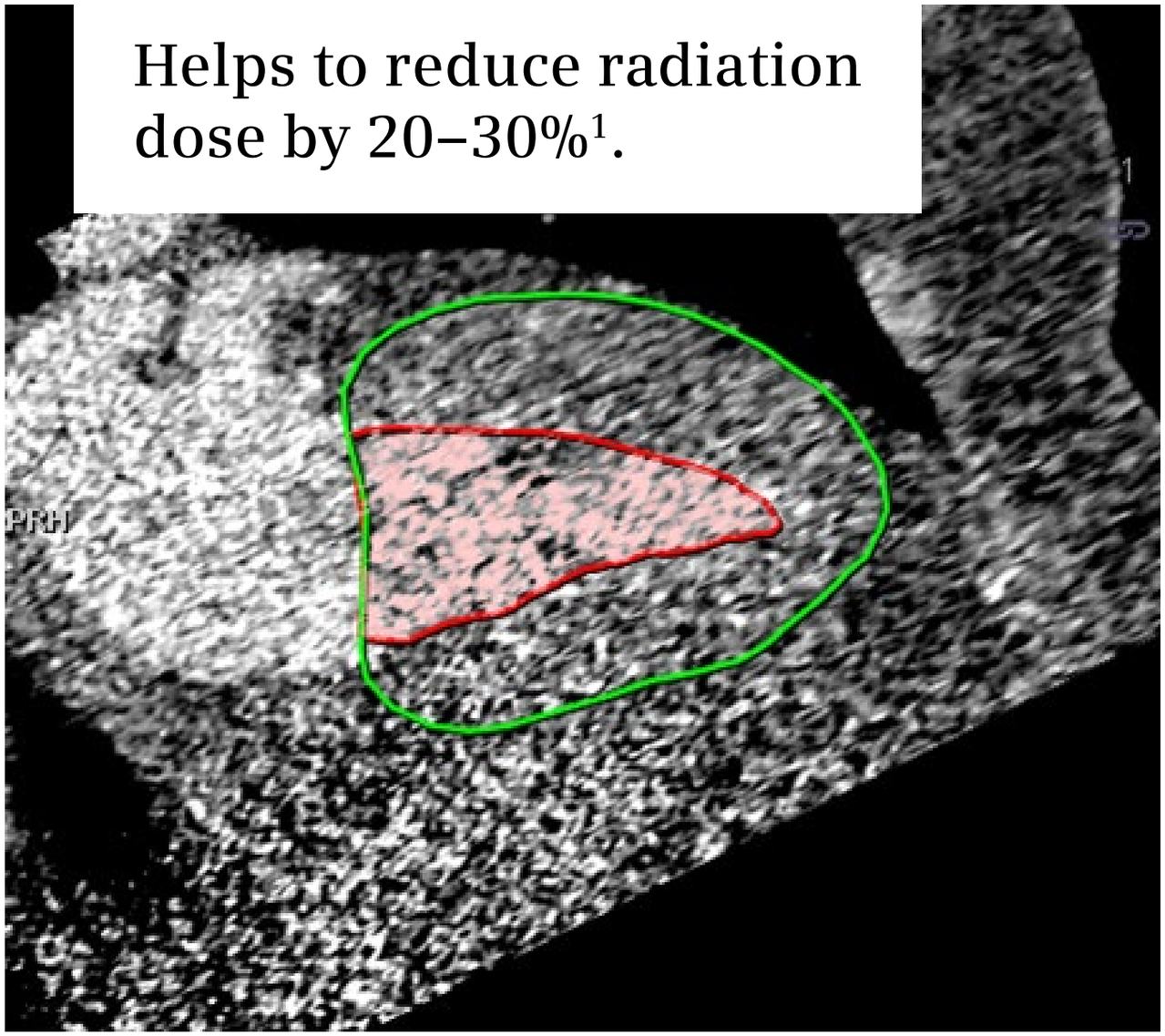


CT Scanners of the SOMATOM Definition family[1] and SOMATOM Force

featuring the MinDose scan mode help reduce radiation dose by 20–30%[2]. This enables hospitals to carry out full cardiac analysis exams in accordance with the ALARA principle.

[1] SOMATOM Definition AS, SOMATOM Definition Edge, SOMATOM Definition Flash
[2] Results may vary. Data on file.

Computed Tomography
Winning Combination

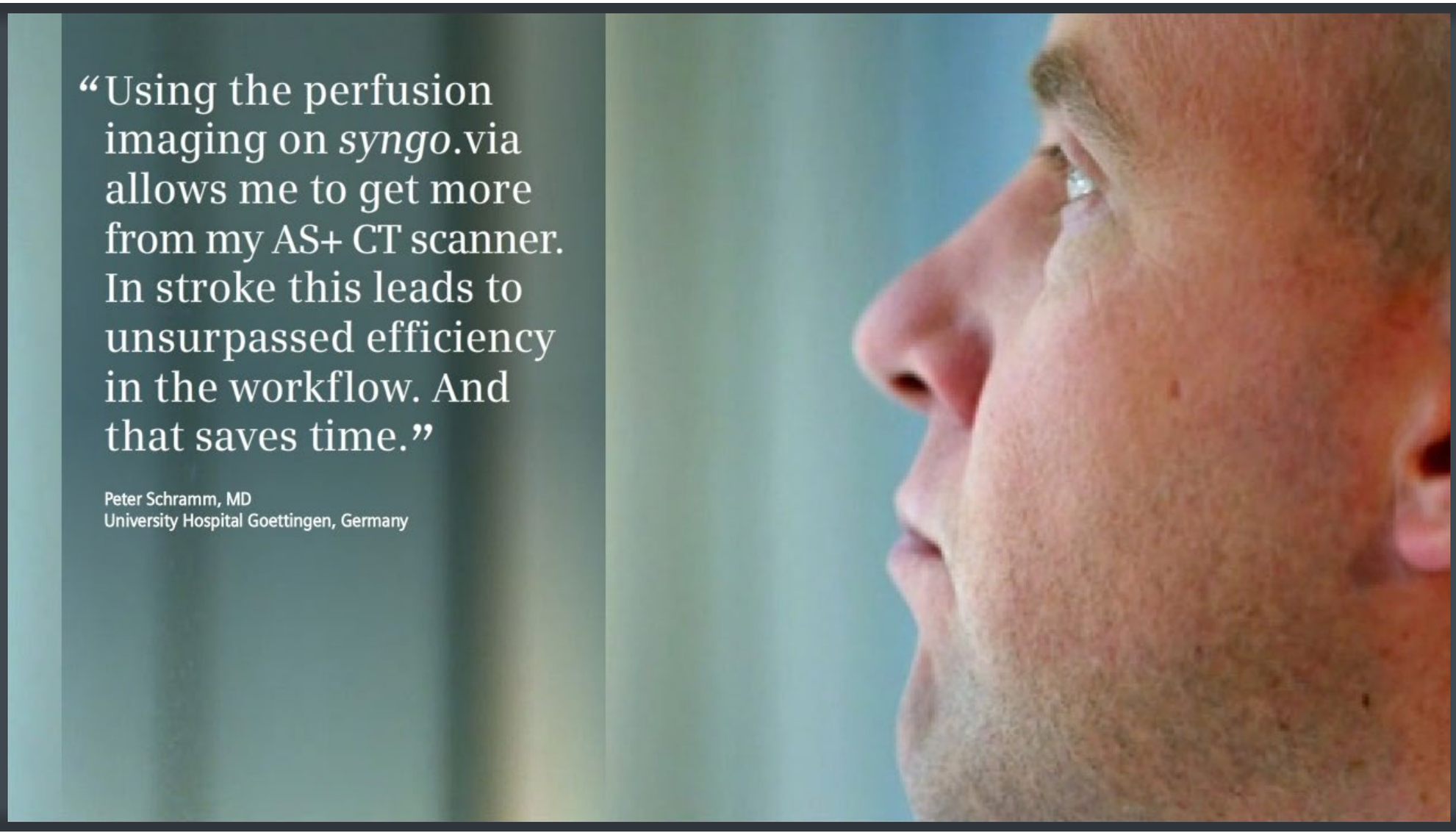


syngo.CT Cardiac Function[1]

syngo.CT Cardiac Function[1] supports robust ventricular border detection for functional assessment of both ventricles. This enables radiologists to efficiently make a confident diagnosis, even when working with minimum-dose images.

[1] Results may vary. Data on file.

Computed Tomography
What our customers are saying



syngo.via >> Modalities >> Computed Tomography

The outcomes achieved by the Siemens customers described herein were achieved in the customer’s unique setting. Since there is no “typical” hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption) there can be no guarantee that others will achieve the same results.

Computed Tomography
All applications

Oncology

- *syngo*.CT Body Perfusion
- *syngo*.CT Bone Reading
- *syngo*.CT Colonography
- *syngo*.CT Colonography Advanced
- *syngo*.CT Colonography – PEV
- *syngo*.CT DE Direct Angio
- *syngo*.CT DE Virtual Unenhanced
- *syngo*.CT Dynamic Angio
- *syngo*.CT Liver Analysis
- *syngo*.CT Lung CAD
- *syngo*.CT Onco Function – Hepatic AEF
- *syngo*.CT Pulmo 3D
- *syngo*.CT Segmentation
- *syngo*.PET&CT Cross-Timepoint Evaluation
- *syngo*.PET&CT Onco Multi-Timepoint
- *syngo*.PET&CT Therapy Interface

Cardiovascular

- *syngo*.CT Cardiac Function
- *syngo*.CT Cardiac Function – Enhancement
- *syngo*.CT Cardiac Function – Right Ventricle
- *syngo*.CT Cardiac Function – Valve Pilot
- *syngo*.CT Calcium Scoring
- *syngo*.CT Coronary Analysis
- *syngo*.CT Dynamic Angio
- *syngo*.CT PE CAD[1]
- *syngo*.CT Rapid Stent Planning
- *syngo*.CT Vascular Analysis
- *syngo*.CT Vascular Analysis – Autotracer

[1] The product is not commercially available in the U.S.

Computed Tomography
All applications

Neurology

- *syngo*.CT Dynamic Angio
- *syngo*.CT Neuro DSA
- *syngo*.CT Neuro Perfusion

Dual Energy

- *syngo*.CT DE Bone Marrow
- *syngo*.CT DE Brain Hemorrhage
- *syngo*.CT DE Calculi Characterization
- *syngo*.CT DE Direct Angio
- *syngo*.CT DE Gout
- *syngo*.CT DE Heart PBV
- *syngo*.CT DE Lung Analysis
- *syngo*.CT DE Monoenrgetic Plus
- *syngo*.CT DE Virtual Unenhanced

Other

- Multimodality 3D Routine Reading (*syngo*.via WS/L/XL)
- *syngo*.via WebViewer

Explore all *syngo*.via applications online:
>> www.siemens.com/*syngo*.via-applications

Magnetic Resonance

MAGNETOM MRI systems and *syngo*.via applications turn image quality into diagnostic value. This winning combination delivers unprecedented image quality, streamlined workflows, and the most comprehensive set of clinical applications available – enabling you to provide excellent care.

>> go to Applications

>> go to Winning Combination

www.siemens.com/*syngo*.via-mr

Magnetic Resonance
Introduction

Leading. With MAGNETOM.

Whether you are just beginning to work with MRI or are at the forefront of research, Siemens MAGNETOM MRI systems put you in the lead – of your clinical field, your research and your business environment. And they help you achieve our joint mission of advancing human health.

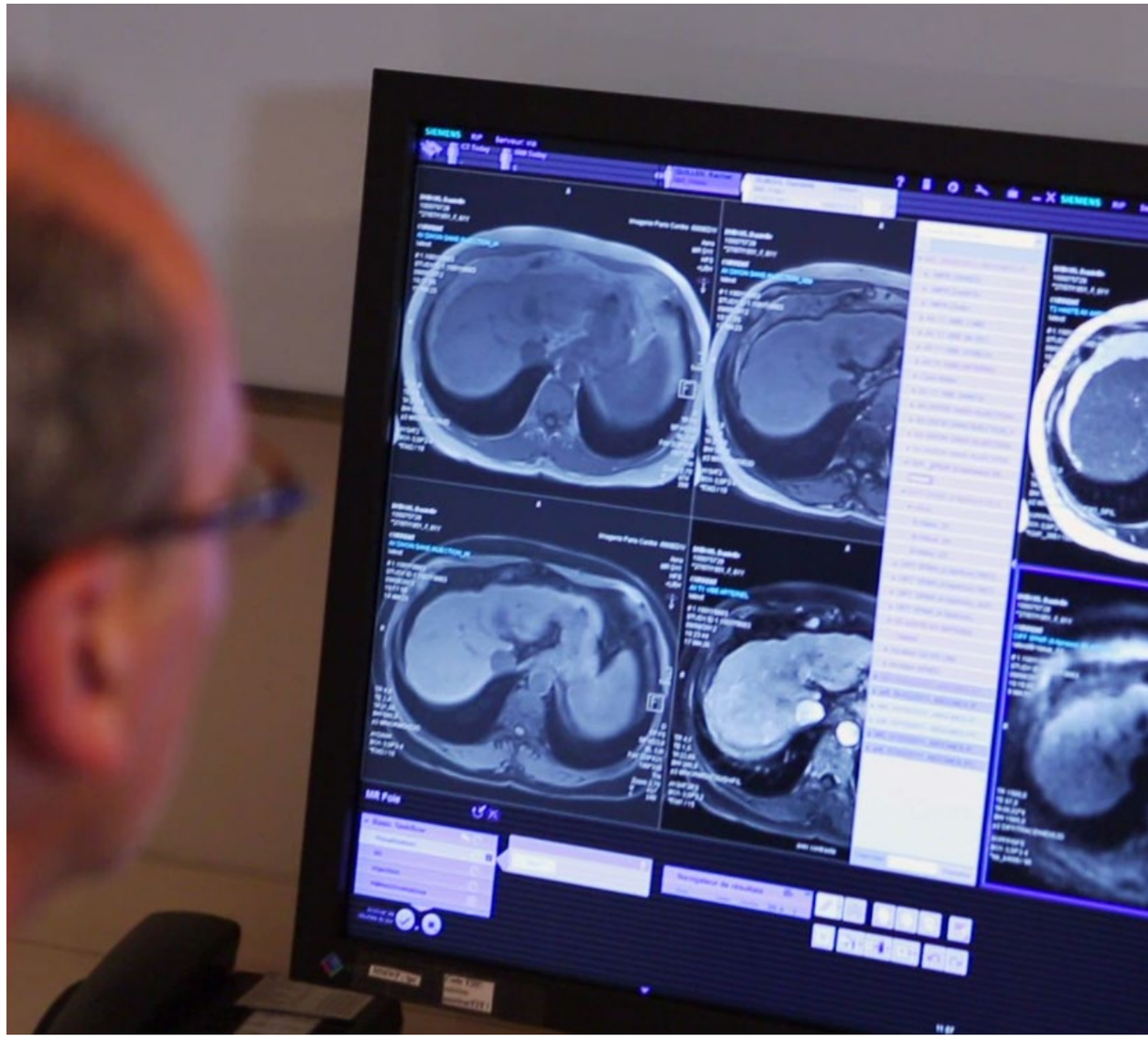
Being a leader in MRI means going for excellence every single day. Saying “why not” instead of “yes but”. And then delivering top results. Again and again. In any hospital, practice, lab or university.

Magnetic Resonance
Introduction

Leading in applications.

It starts with the hardware. With the MAGNETOM scanner, which makes everything possible. This is complemented by innovative technology such as Tim+Dot, that provides consistent image quality, speed and ease-of-use. And *syngo*.via helps you turn image quality into diagnostic value.

Findings, not searching. With MAGNETOM.



Magnetic Resonance
Radiology Engine

The *syngo*.MR General Engine enables more efficient, flexible and intelligent processing in MR Radiology. Whether it is the 3D reference point, the auto zooming functionality in multistage exams, or mean curve and subtraction. The *syngo*.MR General Engine perfectly complements the applications available at the scanner, such as Brain Dot Engine, TWIST, TimCT Angio, and Inline Composing.

syngo.MR General Engine
syngo.MR Composing

The product is still under development and not commercially available yet. Its future availability cannot be ensured.

Magnetic Resonance
Radiology Applications

syngo.MR General Engine

This application is used for the reading of MR examinations, such as standard MRA, urology, neurology, orthopedics, or mammography. With just one click, users can switch to 3D or 4D views of any contrast - without changing the software or task card

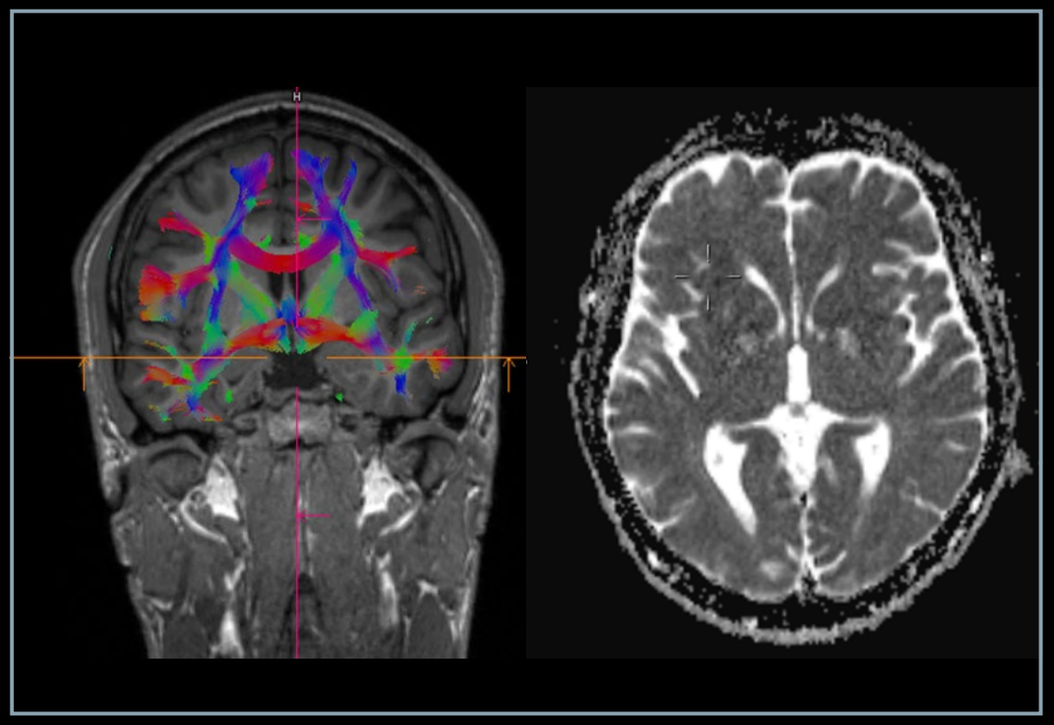
syngo.MR Composing

Applicable in angiography, whole body, and spine reading, but also in other body regions. Users can compose or combine data sets with different fields of view, resolution, matrix and slice thickness.

The product is still under development and not commercially available yet. Its future availability cannot be ensured.

Magnetic Resonance
Neurology Engines

With every tool you need for fast and standardized diagnoses, the *syngo*.MR Neurology applications take you to a whole new level of speed and flexibility in acute neurology. They map images to user-defined reading steps, so you no longer have to search for and organize images. This also means that images and diagnostic steps are less likely to be forgotten as long as you follow the structured workflow.



syngo.MR Neuro Perfusion Engine

- *syngo*.MR Neuro Perfusion
- *syngo*.MR Neuro Perfusion Mismatch

syngo.MR Neuro Perfusion Engine Pro

- *syngo*.MR Neuro Tumor

syngo.MR Neuro 3D Engine

- *syngo*.MR fMRI
- *syngo*.MR Tractography

The product is still under development and not commercially available yet. Its future availability cannot be ensured.

Magnetic Resonance
Neurology Applications

syngo.MR Neuro fMRI
Provides a full set of tools for evaluating clinical fMRIs, and includes advanced features for research-oriented applications.

syngo.MR Neuro Perfusion
Enables processing of brain perfusion datasets: displays relative Mean Transit Time (relMTT), relative Cerebral Blood Volume (relCBV), and relative Cerebral Blood Flow (relCBF) images in color.

syngo.MR Neuro Tumor
NEW

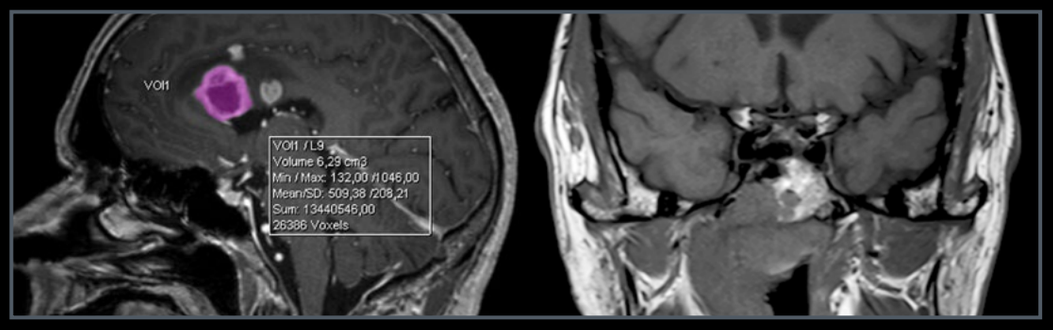
Offers a comprehensive neuro tumor reading workflow: The user gets a quick overview of structural and dynamic imaging data. Motion corrected perfusion maps can be easily generated. Mean curve analyses on ROIs drawn on either anatomical and perfusion images provides the user with deeper insight into lesion characteristics for improved diagnostic confidence.

syngo.MR Neuro Perfusion Mismatch
Extends the assessment by enabling you to calculate the Perfusion-Diffusion mismatch. It is possible to base the calculation on the difference between two ROIs or several combined ROIs in 2D datasets.

syngo.MR Tractography
Visualizes tracts in MPR and VRT in full integration with the fMRI solution. Interactive Tract exploration mode with multiple interactive VOI objects (VOI, fMRI Voxels, Plane) produces real-time result updates when moving seed points.

Magnetic Resonance
Oncology Engines

syngo.MR Oncology applications automatically structure large amounts of data into layouts designed for oncology reading. The 3D Lesion Segmentation is particularly valuable for oncology use cases such as volumetric evaluation of tumors, lymph nodes, and metastases. It is also suitable for non-oncology lesions with sufficient contrast to surrounding tissue. Intuitive editing tools enable users to adjust the segmentation if necessary. The winning combination of TimCT Onco and *syngo*.MR Onco Engine optimizes the workflow from scanning, to processing, to reading.



syngo.MR Onco Engine
- *syngo*.MR Onco
- *syngo*.MR 3D Lesion Segmentation

syngo.MR Spectro Engine
- *syngo*.MR Spectro SVS
- *syngo*.MR Spectro CSI
- *syngo*.MR Spectro Extension

syngo.MR Prostate Engine
- *syngo*.MR Spectro CSI
- *syngo*.MR Tissue 4D

The product is still under development and not commercially available yet. Its future availability cannot be ensured.

Magnetic Resonance
Oncology Applications

syngo.MR 3D Lesion Segmentation
Enables rapid volumetric evaluation of lesions. The user identifies the lesions, and *syngo*.via suggests boundaries and computes volumes. This means you no longer need to spend time on manual 3D segmentations.

syngo.MR BreVis
Provides breast-specific windowing layouts, automatically preprocessed elastic registration for patient motion correction, on-the-fly time course evaluation, and color overlay maps. BreVis gives additional information with VOI statistics with regard to user-defined wash-in and wash-out thresholds.

syngo.MR Onco
Combines oncology workflows that structure a large amount of data automatically and quickly into highly readable layouts with a focus on oncology reading, and includes Onco Multi-Region, Onco Brain, Onco Liver, and Onco TimCT Workflows.

syngo.MR Spectro Extension
Enables comprehensive evaluation of proton MR spectroscopy data and provides workflow guidance.

syngo.MR Spectro CSI
Supports the evaluation of proton MR Chemical Shift Imaging (CSI) data with comprehensive workflow guidance. Provides the possibility of integrated reading of MR images and spectroscopy data.

syngo.MR Spectro Research
Shows multi-nuclear option support, 31P muscle spectrum. It provides three possibilities for data export, and the tool tip indicates the availability of the raw data for export in RDA format.

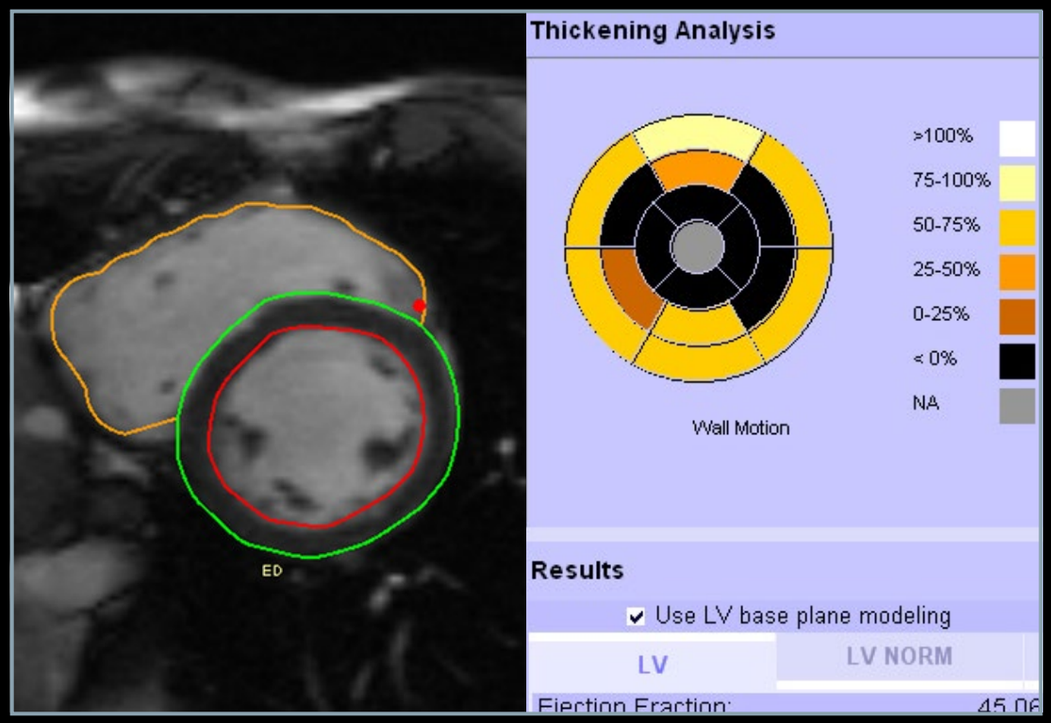
syngo.MR Spectro SVS
Enables the evaluation of proton MR Single Voxel Spectroscopy (SVS) data. Features comprehensive workflow guidance and provides the possibility of integrated reading of MR images and spectroscopy data.

syngo.MR Tissue 4D
NEW

Supports the Tofts model (k-trans, keep, Ve and AUC) as well as qualitative models (wash-in, wash-out, peak enhancement, arrival time and time-to-peak). This application offers powerful pre-processing: define your preferred settings once and start reading and reporting right away.

Magnetic Resonance
Cardiovascular Engine

syngo.MR Cardiology comprises the *syngo*.MR Cardio Engine and applications. They enable you to process the main vascular functions quickly and efficiently. Automatic post-processing allows you to see results as soon as you open your case. In addition, key features such as one-click vessel segmentation, automatic propagation, and automatic correction of the velocity encoding gradient (VENC) make the evaluation of blood flow dynamics faster and more user-friendly.



syngo.MR Cardio Engine

- *syngo*.MR Cardiac 4D Ventricular Function
- *syngo*.MR Cardiac Flow

The product is still under development and not commercially available yet. Its future availability cannot be ensured.

Magnetic Resonance
Cardiovascular Applications

syngo.MR Cardiac 4D Ventricular Function
Quickly and easily delivers volumetric cardiac data including automated or manual segmentation of the left and right ventricle, and provides workflow guidance.

syngo.MR Cardiac Flow
Supports functional and flow evaluation, important tools for MR cardiac examinations in valvular heart disease. It also makes it possible to detect carotid stenosis and pulmonary hypertension.

syngo.MR Cardiac Perfusion
NEW

Supports the analysis and evaluation of heart perfusion studies. This application enables users to rapidly analyze pixel-based parametric up-slope maps. The quality of the maps is optimized due to fully system-guided motion correction.

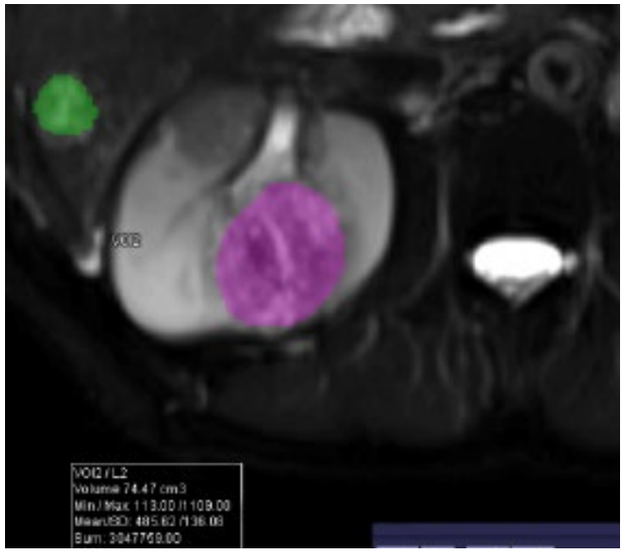
syngo.MR Composing
Suitable for angiography, whole body and spine reading. It makes it possible to compose or combine data sets with different fields of view, resolution, matrix and slice thickness.

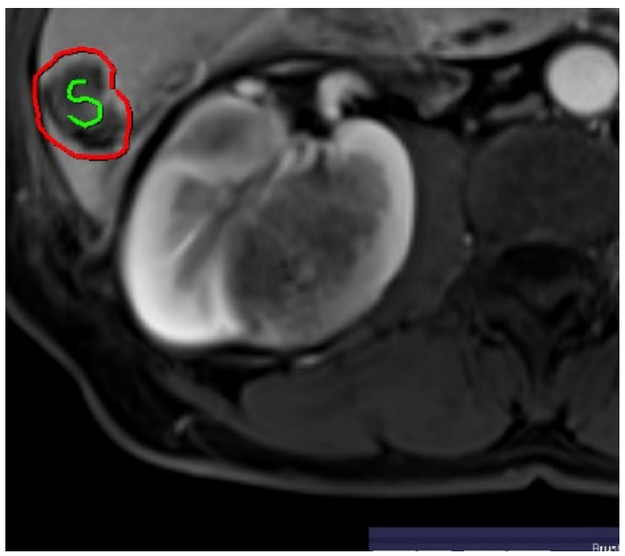
syngo.MR General Engine
Can be used for standard MRA, MR mammography, urology, neurology and orthopedics readings. It enables users to switch to 3D views of any contrast with just one click – without changing the software or task card.

syngo.MR Vascular Analysis
Enables advanced angiography readings with quantification of stenosis in only 3 clicks.

The product is still under development and not commercially available yet. Its future availability cannot be ensured.

Magnetic Resonance
Winning Combination





The challenge – understanding the real nature and extent of cancer in abdominal imaging

»Challenges in abdominal imaging is first of all the consistency and reproducibility of the examination as we have the problem with breath holding images, we have the problem with contrast injection timing.«

Jean-Paul Abecassis, Uroradiologist
Imagerie Paris Centre, France

Magnetic Resonance
Winning Combination

Setting the pace with Dot and *syngo*.via

The scanner

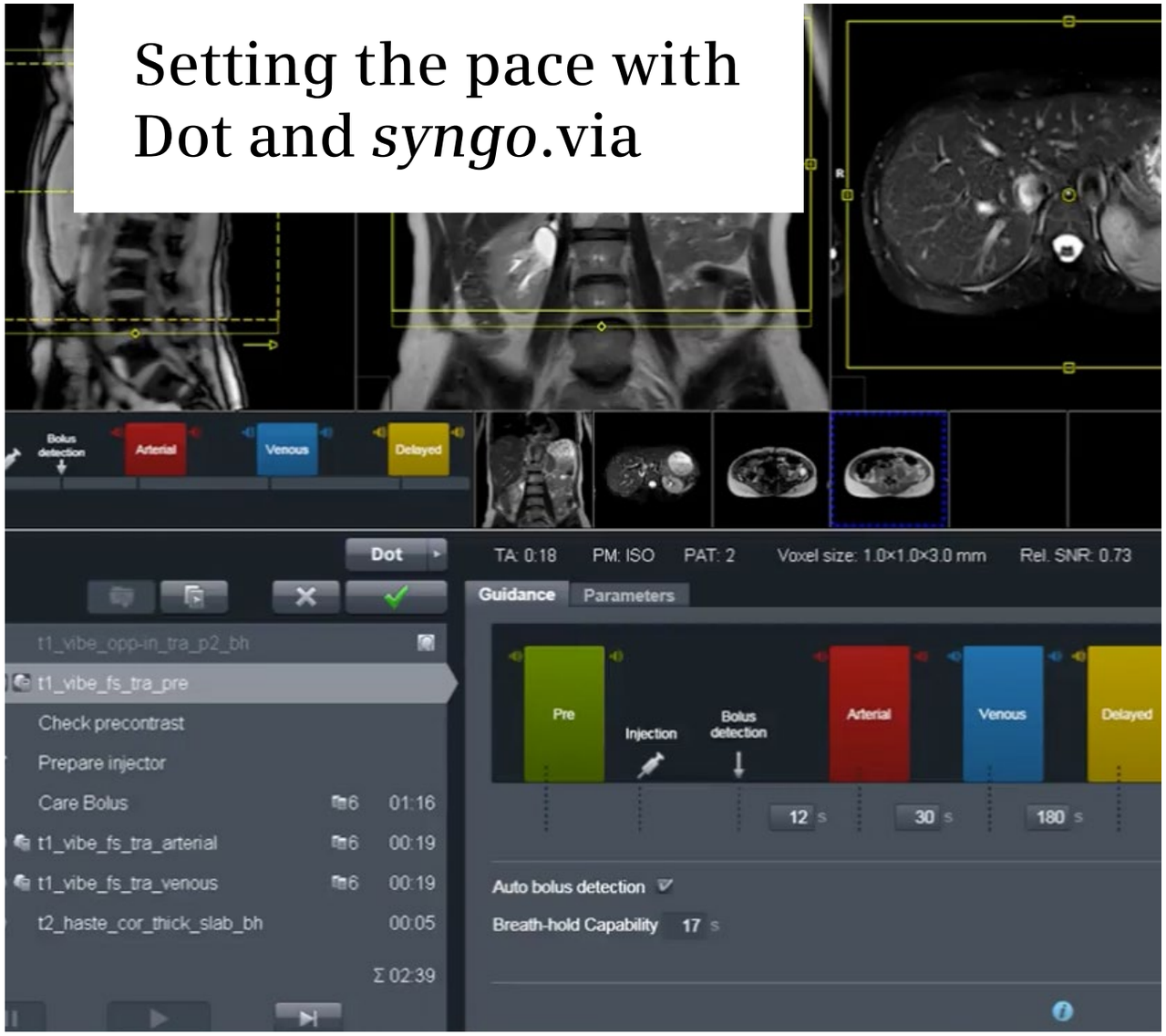
MAGNETOM Aera.
Tim 4G coil technology

- Integrate the Body 18 coil with the Spine 32 for the highest channel count in the industry.
- Experience faster scanning by enabling higher iPAT factors with Tim 4G (CAIPIRINHA).
- Fewer artifacts, faster scan, resulting in less stress for the patient.

Up to 64 independent RF channels.
With MAGNETOM.

Magnetic Resonance
Winning Combination

Setting the pace with Dot and *syngo*.via



The technology

Dot – The Abdomen Dot Engine

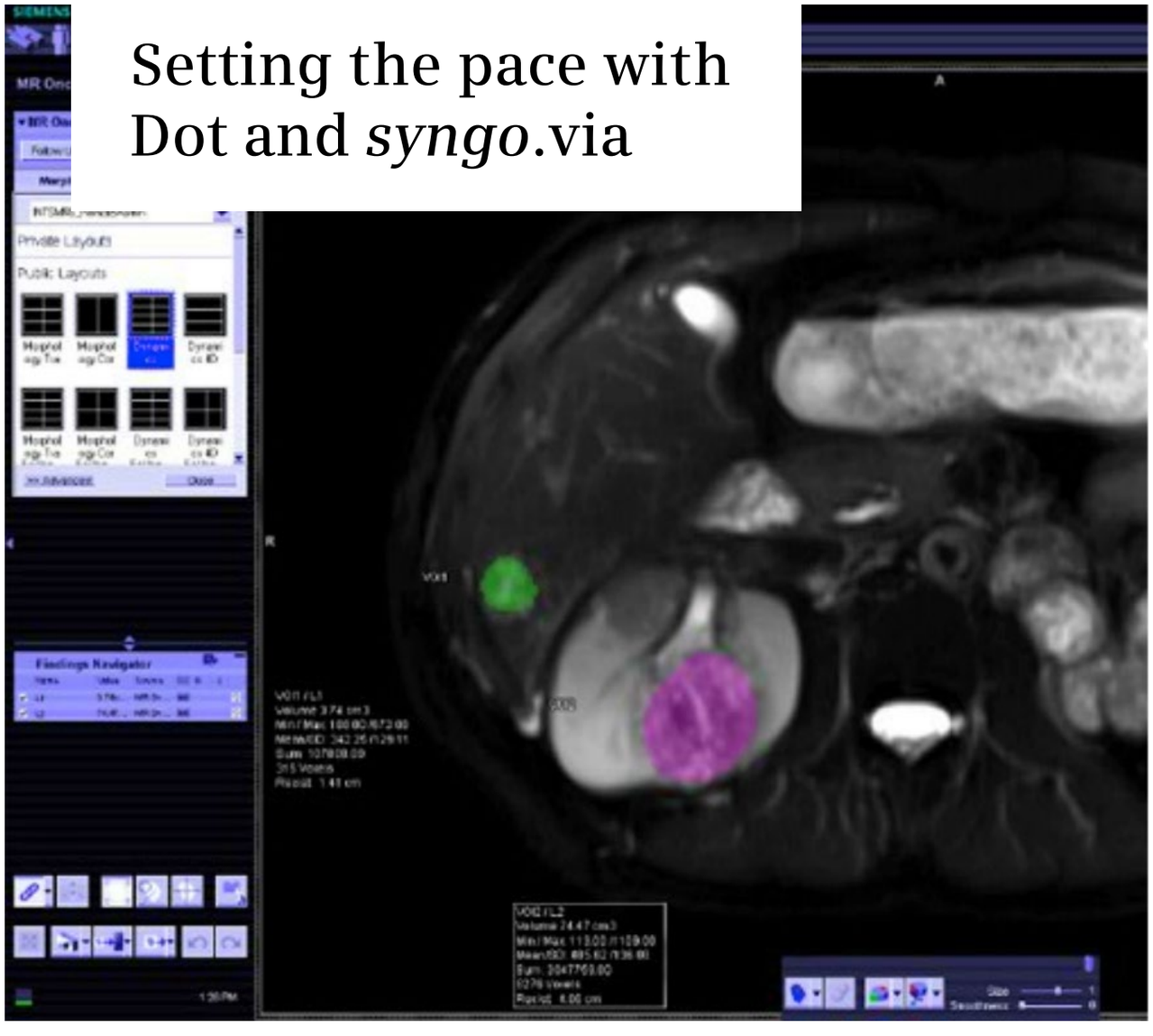
- Requires less user interaction, less chance of error.
- Enables less experienced technologists to perform high-quality exams.
- Helps the user to achieve the optimal timing for each patient with AutoBolus Detection.
- Reduces the number of rescans.
- Cuts the number of cases with non-optimum timing up to 28%[1].

Your standards – consistently.
With MAGNETOM.

[1] Results may vary. Data on file.

Magnetic Resonance
Winning Combination

Setting the pace with Dot and *syngo*.via



MR Abdominal Imaging

The powerful *syngo*.MR Onco Engine improves the accuracy of dynamic bolus timing results and produces optimal arterial phase images.

The Abdomen Dot Engine has the potential to cut the number of cases with non-optimum timing by 28%[1].

[1] Results may vary. Data on file.

Magnetic Resonance
What our customers are saying

syngo.via >> Modalities >> Magnetic Resonance

The outcomes achieved by the Siemens customers described herein were achieved in the customer’s unique setting. Since there is no “typical” hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption) there can be no guarantee that others will achieve the same results.

Magnetic Resonance
All applications

Radiology

- *syngo*.MR Composing
- *syngo*.MR General Engine

Neurology

- *syngo*.MR Neuro fMRI
- *syngo*.MR Neuro Perfusion
- *syngo*.MR Neuro Perfusion Mismatch
- *syngo*.MR Neuro Tumor
- *syngo*.MR Tractography

Oncology

- *syngo*.mMR General
- *syngo*.MR 3D Lesion Segmentation
- *syngo*.MR BreVis
- *syngo*.MR Composing
- *syngo*.MR Onco
- *syngo*.MR Spectro SVS
- *syngo*.MR Spectro CSI
- *syngo*.MR Spectro Extension
- *syngo*.MR Spectro Research
- *syngo*.MR Tissue 4D

The product is still under development and not commercially available yet. Its future availability cannot be ensured.

Magnetic Resonance
All applications

Cardiovascular

- *syngo*.MR Cardiac 4D Ventr. Function
- *syngo*.MR Cardiac Flow
- *syngo*.MR Cardiac Perfusion
- *syngo*.MR Composing
- *syngo*.MR General Engine
- *syngo*.MR Vascular Analysis

Other

- Multimodality 3D Routine Reading (*syngo*.via WS/L/XL)
- *syngo*.via WebViewer

Explore all *syngo*.via applications online:
>> www.siemens.com/*syngo*.via-applications

Molecular Imaging

syngo.via offers a complete suite of Molecular Imaging applications for oncology, cardiology and neurology. It has been designed to transform big data into brilliant results.

>> go to Applications

>> go to Winning Combination

www.siemens.com/*syngo*.via-mi

Molecular Imaging
Introduction

What is molecular imaging?

Molecular Imaging uses the natural biological processes in the body to create an image showing functional activity instead of structure. It visualizes biochemical processes through the accumulation of imaging biomarkers (tracers) in the cells. These imaging biomarkers mimic normal molecules that the body is accustomed to metabolizing or using, so they interact with the body naturally. If they accumulate abnormally in a particular area, Molecular Imaging can visualize this activity very early in the process, long before many medical issues can be identified with other diagnostic tests. This provides physicians with a way to accurately see, define and determine diseases at an early stage.

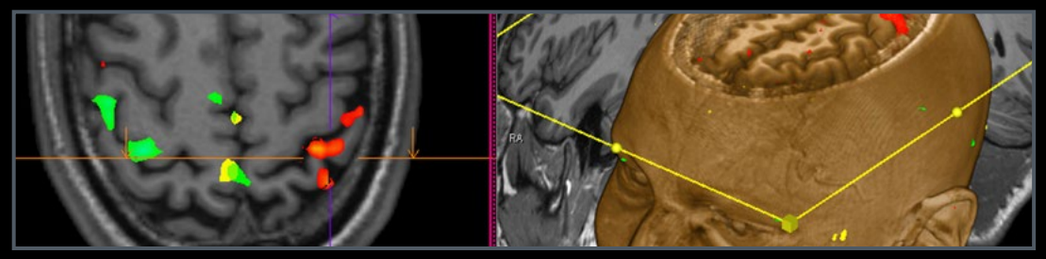
Molecular Imaging
Introduction

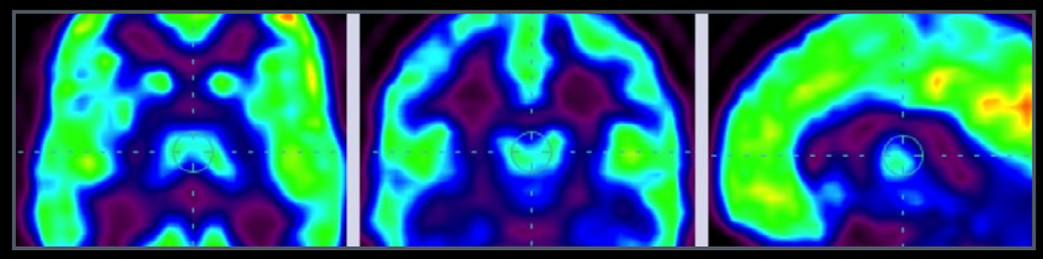
How PET and SPECT technologies generate images

Both PET and SPECT operate on the same general principle. An imaging biomarker is injected into the patient's bloodstream. It is left to circulate in the body for a period of time, and is absorbed into the tissue and organs. A scan is then performed to identify the distribution of the imaging biomarker. This information is transferred to a computer that converts the data into a 3D, functional image. The resulting image highlights areas with increased, diminished or no metabolic activity. PET and SPECT differ primarily in the way they acquire the data, and the type of imaging biomarker injected.

Molecular Imaging
Neurology Engines

Molecular Imaging neurology applications are used in different neurological conditions, ranging from movement disorders and seizures to dementia. Highly automated workflows help generate reproducible results even in low patient volume settings. The recent introduction of PET amyloid scans for the evaluation of Alzheimer's disease and other neurological disorders makes these applications particularly relevant.





syngo.SPECT Neurology Engine
- *syngo*.SPECT Neuro Database Comparison[1]
- *syngo*.MI Neuro Hybrid 3D

syngo.SPECT Neurology Engine Pro
- *syngo*.SPECT Striatal Analysis
- *syngo*.MI Neuro Subtraction

syngo.mCT Neurology Engine
- *syngo*.PET Neuro Database Comparison
- *syngo*.MI Neuro Hybrid 3D

syngo.mCT Neurology Engine Pro
- *syngo*.MI Neuro Database Creation
- *syngo*.CT Neuro DSA

[1] *syngo*.SPECT Neuro DB Comparison is intended for use only with approved amyloid radiopharmaceuticals in the country of use.

Molecular Imaging
Neurology Applications

syngo.MI Neuro Database Creation
Enables users to create and manage custom normal databases for any PET or SPECT neurology study to match site specific patient population and protocol needs. Patients can be easily added to custom databases during the normal workflow.

syngo.PET Amyloid Plaque
Complements the qualitative visual interpretation of PET amyloid scans with quantitative information. It identifies six key brain regions with characteristic PET signal in diseased patients by registering to a template brain scan. SUV ratios are automatically computed for comparison against published thresholds. Also includes a PET amyloid normal database.

syngo.PET Neuro Database Comparison
Enables automated registration and fusion of PET studies with CT and MR. The application supports automated spatial normalization and 3D ROI placement, Voxel and 3D ROI-based quantification of neuro glucose metabolism (PET: FDG).

syngo.SPECT Neuro Database Comparison
Provides physicians with information about the degree of deviation of a patient exam from the normal database, in standard deviations. Normal databases for SPECT are available for ECD and HMPAO.

syngo.SPECT Striatal Analysis
Enhances the *syngo*.via MI Neurology workflows by supporting comprehensive striatal evaluations for the assessment of movement disorders, especially Parkinson's disease. It makes it possible to conduct symmetry evaluations, normal database comparisons, and comparisons to a reference region based on DatScan studies.

syngo.CT Neuro DSA (Digital Subtraction Angiography)
This dedicated post-processing application allows you to remove bone structures from CT Angiography (CTA) data sets in order to improve visualization of the cerebral vasculature. This enhances visualization of vascular structures in the area of the skull base and helps to delineate aneurysms and other vascular diseases.

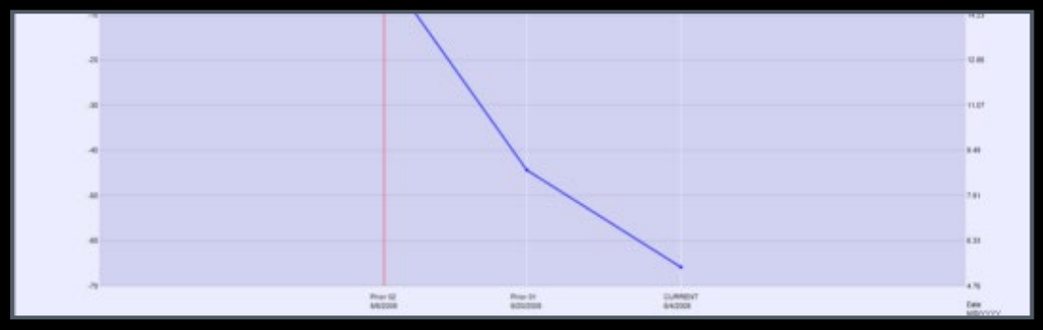
syngo.CT Neuro Perfusion
This application visualizes blood perfusion in the brain. In the case of ischemic stroke, it can help estimate the size of the core infarct and the extent of tissue at risk of infarction (penumbra) that could potentially be salvaged with further treatment.

syngo.SPECT Neuro Subtraction[1] NEW
Enables computation of local differences in cerebral blood flow between the ictal and interictal state of neuronal activation that occurs in epileptic seizures.

[1] This product is not yet commercially available in the USA and China as well as in some other countries. Its future availability for these countries cannot be ensured.

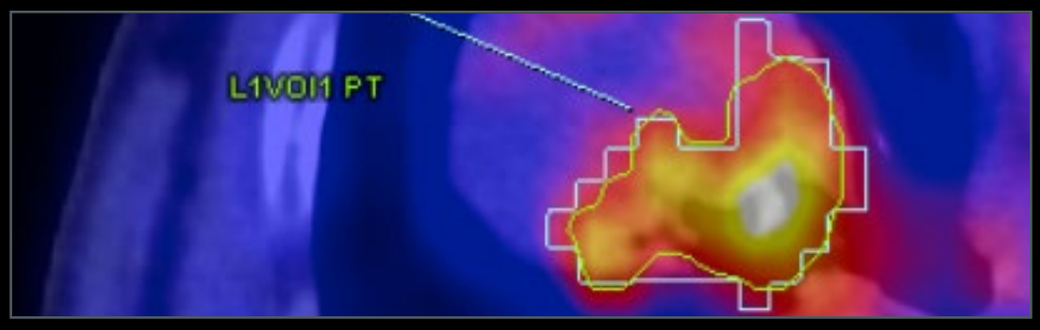
Molecular Imaging
Oncology Engines

Molecular Imaging oncology applications are designed to deliver accurate and reproducible results, supporting early detection and therapy monitoring. The workflow-centric design makes follow-up readings fast and efficient. For example, new lesions can be segmented and quantified on CT and PET simultaneously, providing metrics such as RECIST and PERCIST. Trending charts with up to eight time points and the EQPET feature enable longitudinal comparison of lesions – independent of scanner make, model or reconstruction algorithms.



syngo.mCT Oncology Engine

- *syngo*.PET&CT Cross-Timepoint Evaluation
- *syngo*.PET Segmentation



syngo.mCT Oncology Engine Pro

- *syngo*.PET&CT Onco Multi-Timepoint
- *syngo*.CT Segmentation
- *syngo*.PET&CT Therapy Interface
- *syngo*.PET Dynamic Analysis

Molecular Imaging
Oncology Applications

syngo.PET Dynamic Analysis
Graphs radiopharmaceutical uptake over time (time activity curve) via SUV-based quantification of volumetric regions of interest, using metrics such as SUVmax, SUVpeak and SUVmean.

syngo.PET Segmentation
Allows for SUV-based volumetric segmentation, and enables comparison of longitudinal patient exams independent of scanner make, model or reconstruction algorithms. Automatically provides volume, RECIST, SUVmax and other metrics. Complete implementation for the PERCIST standardised response criteria for PET, incl. automatic placement of PERCIST reference regions.

syngo.MI Reading
Provides a comprehensive set of sophisticated layouts specifically designed for reading general nuclear medicine cases. The application automatically selects the most appropriate layout based upon the available data.

syngo.CT Segmentation
This application provides advanced features for faster, simpler oncological reading. It supports the automated segmentation and evaluation of lesions in the lungs, liver, lymph nodes and other organs – providing standardized quantification in RECIST (1.0 & 1.1), WHO and volume as well as Choi criteria and Advanced HU Statistics.

syngo.PET&CT Cross-Timepoint Evaluation
This application allows you to assess changes in tumor activity and size across four points in time, by comparing quantitative analysis of volume, RECIST, WHO, and minimum, average and maximum functional uptake.

syngo.PET&CT Onco Multi-Timepoint
Increases the number of time points that can be displayed at the same time in a single layout in fully synchronized view from four to eight.

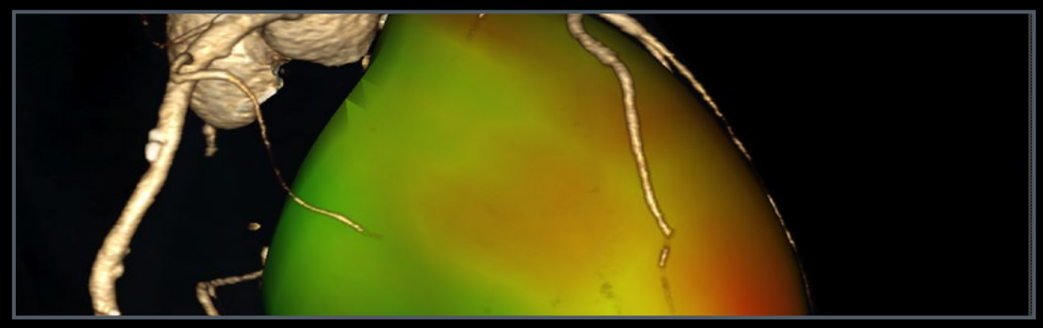
syngo.PET&CT Therapy Interface
Publishes Gross Tumor Volumes (GTV) contours as DICOM RT Structure Sets for use in radiation therapy planning. Converts diagnostic regions of interest such as PET iso-contours and PET and CT segmentations into Gross Tumor Volumes (GTV) and visualizes GTV contours over planning CT and other relevant volumes via fused segments.

Molecular Imaging
Cardiovascular Engines

Molecular Imaging cardiology applications support the entire cardiac workup, ranging from conventional calcium scoring and functional, perfusion and viablity evaluation to advanced myocardial blood flow quantification. The hybrid display provides correlative visualization of stenotic areas on the CTA and their hemodynamic impact in the myocardium.

syngo.mCT Cardiology Engine 4DM
- *syngo*.PET Corridor4DM
- *syngo*.CT Extension Corridor4DM
- *syngo*.CT Calcium Scoring

syngo.mCT Cardiology Engine Pro
- *syngo*.PET Myocardial Blood Flow
- *syngo*.MI Hybrid Coronary View
- *syngo*.CT Coronary Analysis
- *syngo*.CT Cardiac Function



syngo.SPECT Cardiology Engine 4DM
- *syngo*.SPECT Corridor4DM

syngo.SPECT Cardiology Engine Pro 4DM
- *syngo*.CT Extension Corridor4DM
- *syngo*.CT Calcium Scoring

Molecular Imaging
Cardiovascular Applications

syngo.CT Extension Corridor4DM
An extension available for *syngo*.PET Corridor4DM and *syngo*.SPECT Corridor4DM. It enables volumetric registration of hybrid or stand-alone CT to PET and SPECT.

syngo.MI Hybrid Coronary View
Enables interactive fused VRT display of PET or SPECT quantification results with CT coronary angiography. PET or SPECT quantification results can be selected as stress or rest perfusion, reversibility, stress or rest blood flow and coronary flow reserve.

syngo.PET Corridor4DM
Offers full access to the Invia Corridor 4DM PET suite for assessment of PET perfusion scans.

syngo.PET Extension Corridor4DM CFR
Optional extension to *syngo*.PET Corridor4DM.
Adds Coronary Flow Reserve (CFR) using the GFADS algorithm.

syngo.PET Myocardial Blood Flow
Enables physicians to review relative perfusion results together with myocardial blood flow in ml/min and flow reserve in a single application, and supports both rubidium and ammonia tracers.

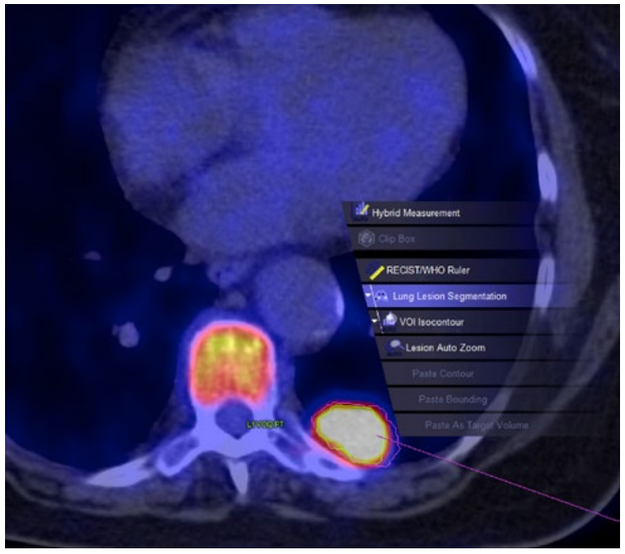
syngo.SPECT Corridor4DM
State-of-the-art software for the quantification, review, and reporting of cardiac perfusion, function and anatomy. It includes transient ischemic dilation (TID), myocardial function incl. LV volumes and EF, regional wall thickening, motion, and time to peak contractility. It also provides databases for assessment of FDG distribution and viability.

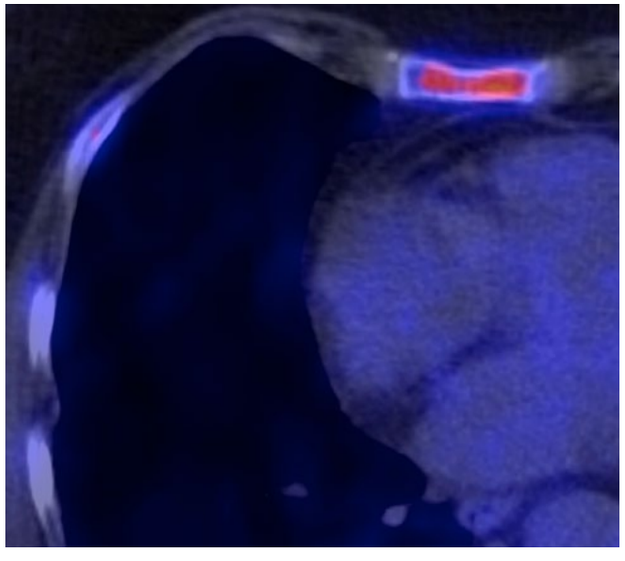
syngo.CT Cardiac Function
This application allows you to read and diagnose CT images of the heart in order to evaluate left ventricular function. As a result, it is now possible to complete a full cardiac assessment in less than four minutes.

syngo.CT Calcium Scoring
This workflow step quantifies coronary calcifications (mass, volume, Agatston score) and calculates the patient's coronary age. During the evaluation, the patient's score is compared to the scores of a healthy reference group, e.g. the MESA study.

syngo.CT Coronary Analysis
This function provides a cardiac-specific set of automatic pre-processing steps and display functions, in order to rapidly and reliably evaluate and quantify angiography images of the coronary arteries – making it possible to rule out coronary artery disease in less than a minute.

Molecular Imaging
Winning Combination



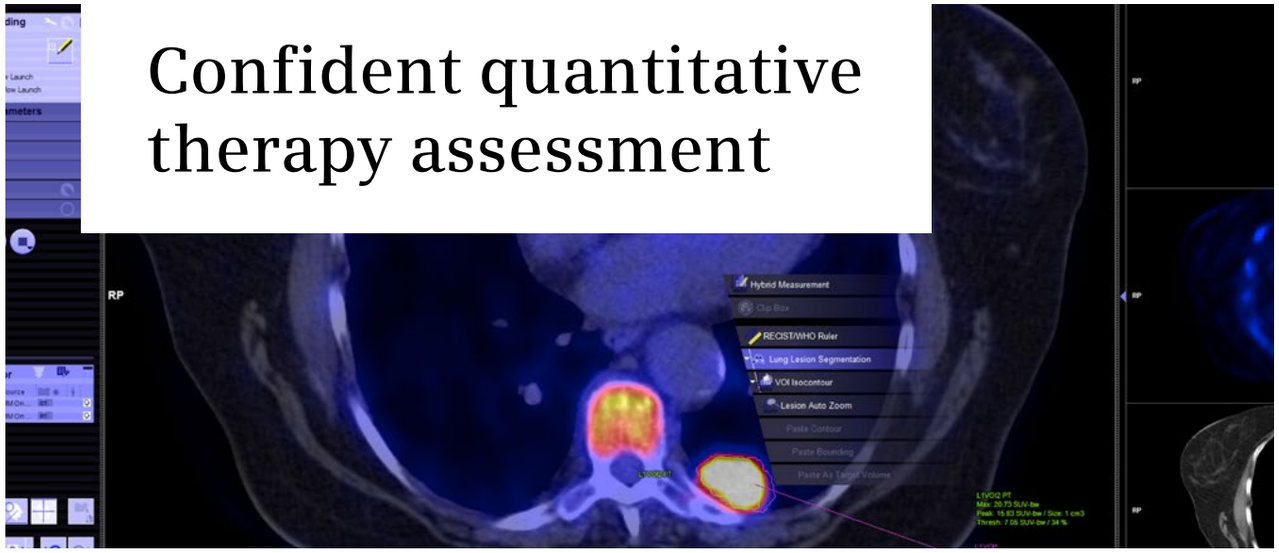


More confident therapy decisions

syngo.via facilitates cancer therapy decisions by providing unique metabolic information for early quantitative assessment of treatment response – independent of scanner make, model or reconstruction algorithms.

Molecular Imaging
Winning Combination

Confident quantitative therapy assessment



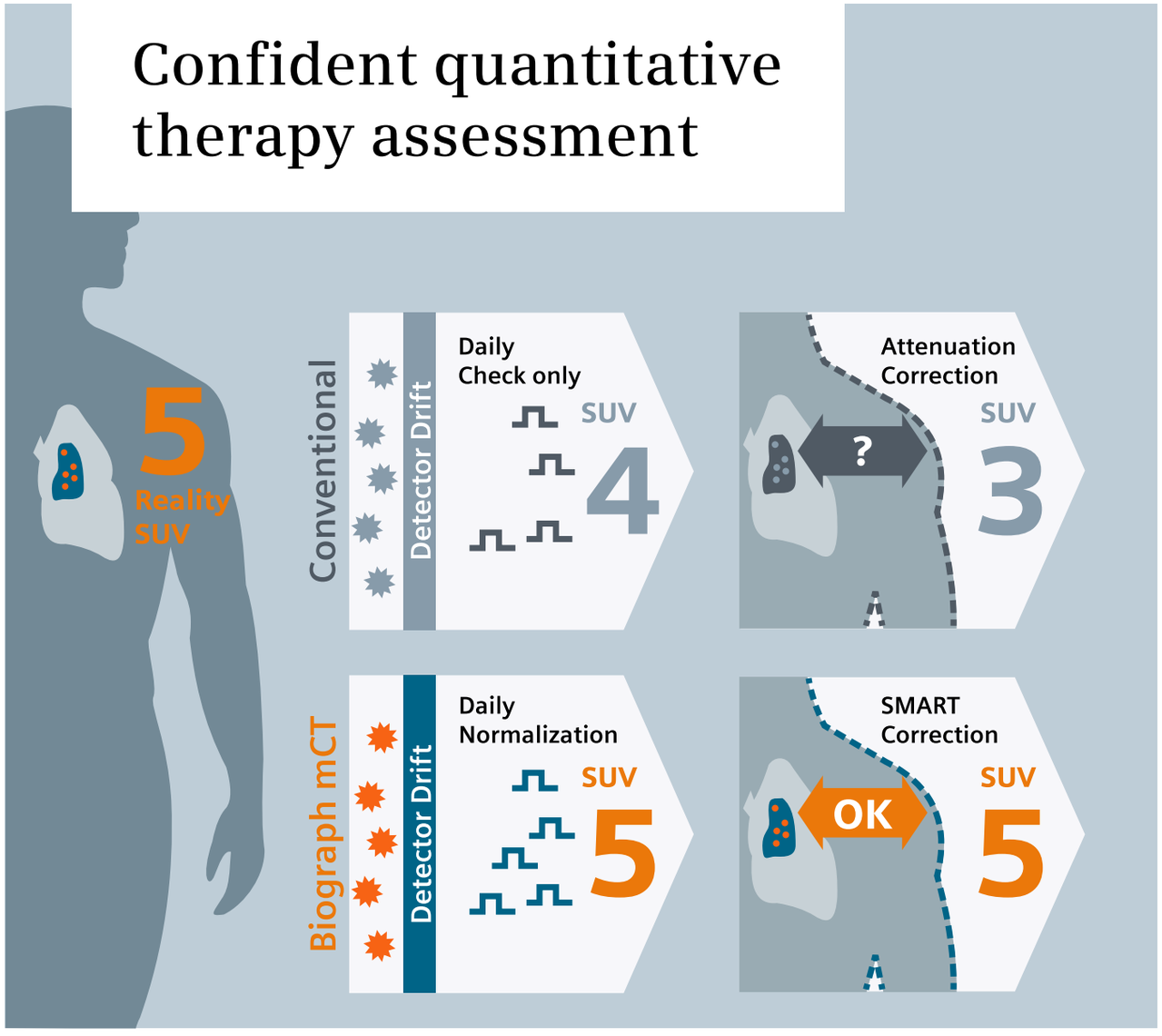
***syngo*.mCT Oncology**

Biograph mCT Flow™ provides accurate and reproducible quantification of tumor activity with precise registration with Quanti•QC and SMART PHS technologies.

Together with *syngo*.via and its *syngo*.mCT Oncology Engine, physicians can quantitatively measure changes in tumor physiology over multiple timepoints with one-click hybrid segmentation and graphical trending tools to more easily assess therapy response.

Molecular Imaging
Winning Combination

Confident quantitative therapy assessment

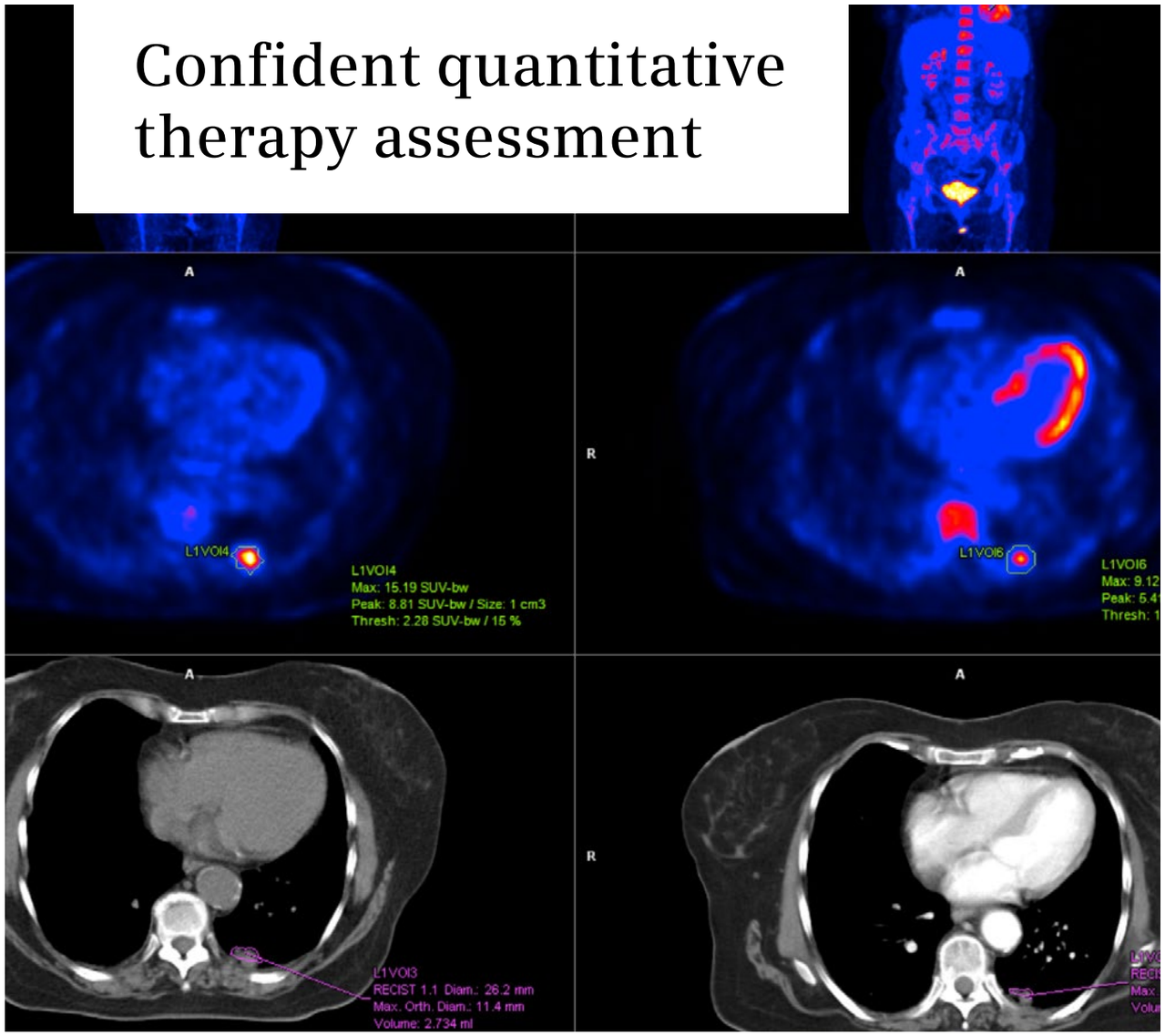


Biograph mCT Flow™

Quality Control: The unique Quanti•QC method performs daily calibration of 12 scanner parameters for accurate and reproducible SUV measurements.

PET and CT Registration PHS provides the only cantilever patient bed designed to prevent deflection and ensure more accurate registration for attenuation correction.

Molecular Imaging
Winning Combination



***syngo*.via Oncology**

Hybrid Tools: One-click hybrid quantification tools for RECIST and SUVpeak enable the routine application of PET Response Criteria in Solid Tumors (PERCIST).

The new EQPET feature makes it possible to compare longitudinal patient exams to determine disease manifestation and change, independent of scanner make, model or reconstruction algorithms.

Graphical Trending: Assessment of therapy response criteria is fast and intuitive with the graphical trending chart.

Molecular Imaging
What our customers are saying

The outcomes achieved by the Siemens customers described herein were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption) there can be no guarantee that others will achieve the same results.

Molecular Imaging
All applications

Neurology

- *syngo*.CT Neuro DSA
- *syngo*.CT Neuro Perfusion
- *syngo*.MI Neuro DB Creation
- *syngo*.PET Amyloid Plaque
- *syngo*.PET Neuro DB Comparison
- *syngo*.SPECT Neuro DB Comparison
- *syngo*.SPECT Neuro Subtraction
- *syngo*.SPECT Striatal Analysis

Oncology

- *syngo*.CT Segmentation
- *syngo*.MI Reading
- *syngo*.PET&CT Cross-Timepoint Evaluation
- *syngo*.PET&CT Onco Multi-Timepoint
- *syngo*.PET&CT Therapy Interface
- *syngo*.PET Dynamic Analysis
- *syngo*.PET Segmentation

Molecular Imaging
All applications

Cardiology

- *syngo*.CT Cardiac Function
- *syngo*.CT Calcium Scoring
- *syngo*.CT Coronary Analysis
- *syngo*.CT Extension Corridor4DM
- *syngo*.MI Hybrid Coronary View
- *syngo*.PET Corridor4DM
- *syngo*.PET Myocardial Blood Flow
- *syngo*.SPECT Corridor4DM

Other

- Multimodality 3D Routine Reading (*syngo*.via WS/L/XL)
- *syngo*.via WebViewer

Explore all *syngo*.via applications online:
>> www.siemens.com/*syngo*.via-applications

Mammography

Leveraging our broad experience in diagnostics and our passion for excellence, Siemens offers innovative solutions to support the daily battle against breast cancer. For example, *syngo*.Breast Care[1] for Mammography takes reading flexibility to a whole new level.

>> go to Applications

>> go to Winning Combination

www.healthcare.siemens.com/mammography/reading-reporting/*syngo*-breast-care

[1] *syngo*.Breast Care is not yet commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens organization for further information.

Mammography
Introduction

Today's reality

Breast cancer is the most common cancer in women worldwide, affecting more than 10% of women in their lifetime. Although earlier detection and better treatment may have reduced mortality in recent years, 30% of women with breast cancer still die from the disease. However, several randomized controlled clinical trials have proven that mammography screening can reduce breast cancer mortality – providing hope.

Mammography
Introduction

Our solution

Mammomat Inspiration with PRIME Technology[1] delivers up to 30% less dose[2] and uncompromised image quality. Equipped with the calming MoodLight[3] it offers greater comfort to relax patients. Helpful features make it easy to use and outstandingly quick. True 3D Breast Tomosynthesis[1] allows for improved early detection of lesions and stereotactic biopsy ensures a seamless workflow.
Adding *syngo*.Breast Care[1] enables highly flexible mammography and tomosynthesis reading for increased efficiency.

[1] The products mentioned are not commercially available in all countries. Due to regulatory reasons their future availability cannot be guaranteed. Please contact your local Siemens organization for further information.
[2] Compared to grid-based acquisition with MAMMOMAT Inspiration, depending on breast thickness.
[3] Option

Mammography
Introduction

syngo.Breast Care – Get the full picture in mammography reading

This highly flexible application supports state-of-the-art mammography and tomosynthesis reading. It enables users to shape their workflows in line with their personal preferences – and define preferred layouts, sizes, and tools. The application enables comparison of both 2D and tomosynthesis volumes for prior and follow-up exams, enhanced by our unique Link-it function. And images from other modalities can also be included, such as ultrasound and MRI – wherever[1] you are, even with simultaneous users.

[1] Prerequisites include: Internet connection to clinical network, DICOM compliance, meeting of minimum hardware requirements, and adherence to local data security regulations.

Mammography
Breast Care Applications

syngo.Breast Care CAD Display

syngo.Breast Care CAD Display is an add-on for advanced mammography reading. It enables different workflows to personal preferences, including for CAD markers.

syngo.Breast Care Link-it[1] NEW

An application that matches regions of interest (ROIs) to the corresponding locations in any other view. Link-it technology allows users to link to 2D and 3D files, prior examinations, follow-ups, current images and even images from other mammography systems.

syngo.Breast Care Reading

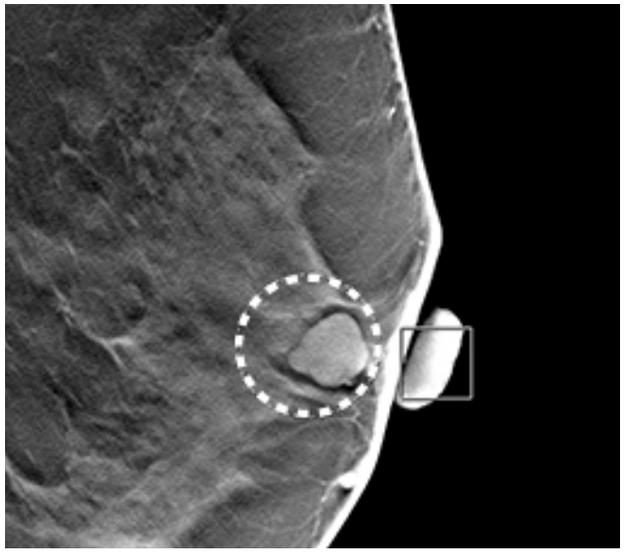
The client-server application for state-of-the-art mammography reading – marked by outstanding flexibility.

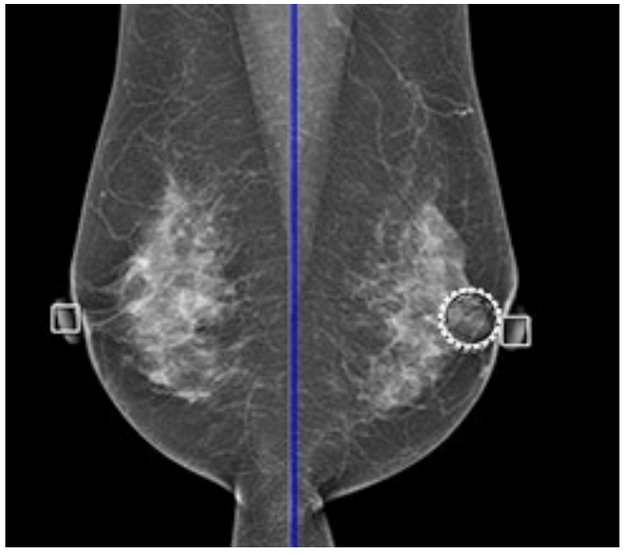
syngo.via Breast Care Tomo

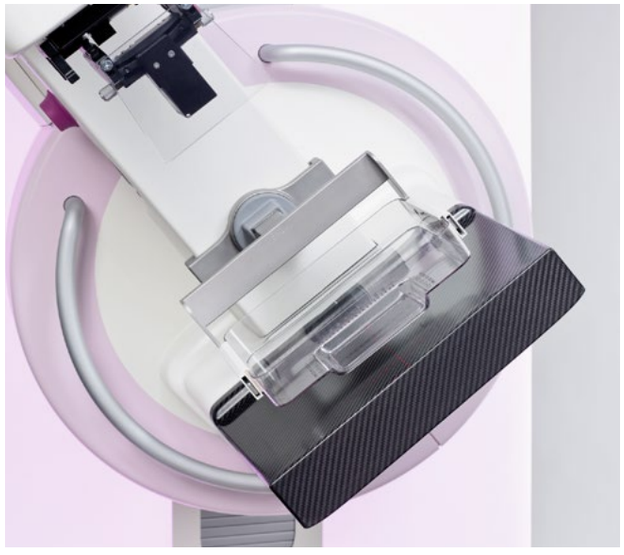
syngo.Breast Care Tomo empowers you to make the most out of your tomosynthesis reading. It is possible to compare 2D and tomosynthesis[1] images, and users can configure layouts and customize the workflow.

[1] *syngo*.Breast Care Link-it is not commercially available.
Due to regulatory reasons its future availability cannot be guaranteed.

Mammography
Winning Combination



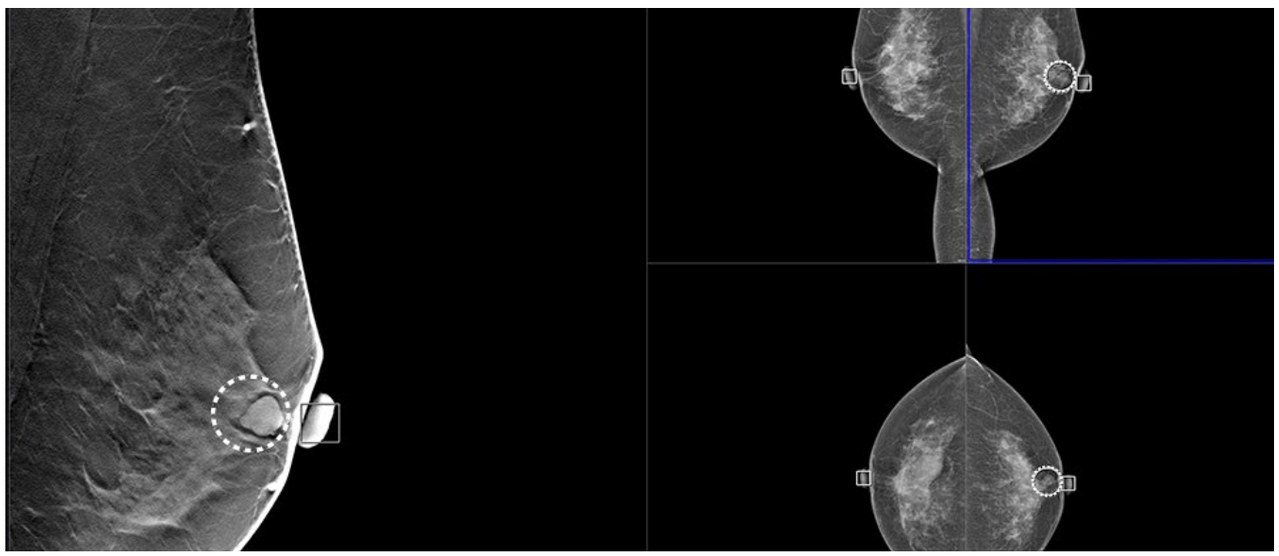




When used in combination *syngo*.Breast Care and Mammomat digital mammography systems deliver benefits for both routine and challenging cases.
This winning combination boosts quality and efficiency by optimizing the workflows with excellent tools.

Mammography
Winning Combination

Images from an all-in-one system – linked to each other



Mammomat Inspiration together with *syngo*.Breast Care Link-it

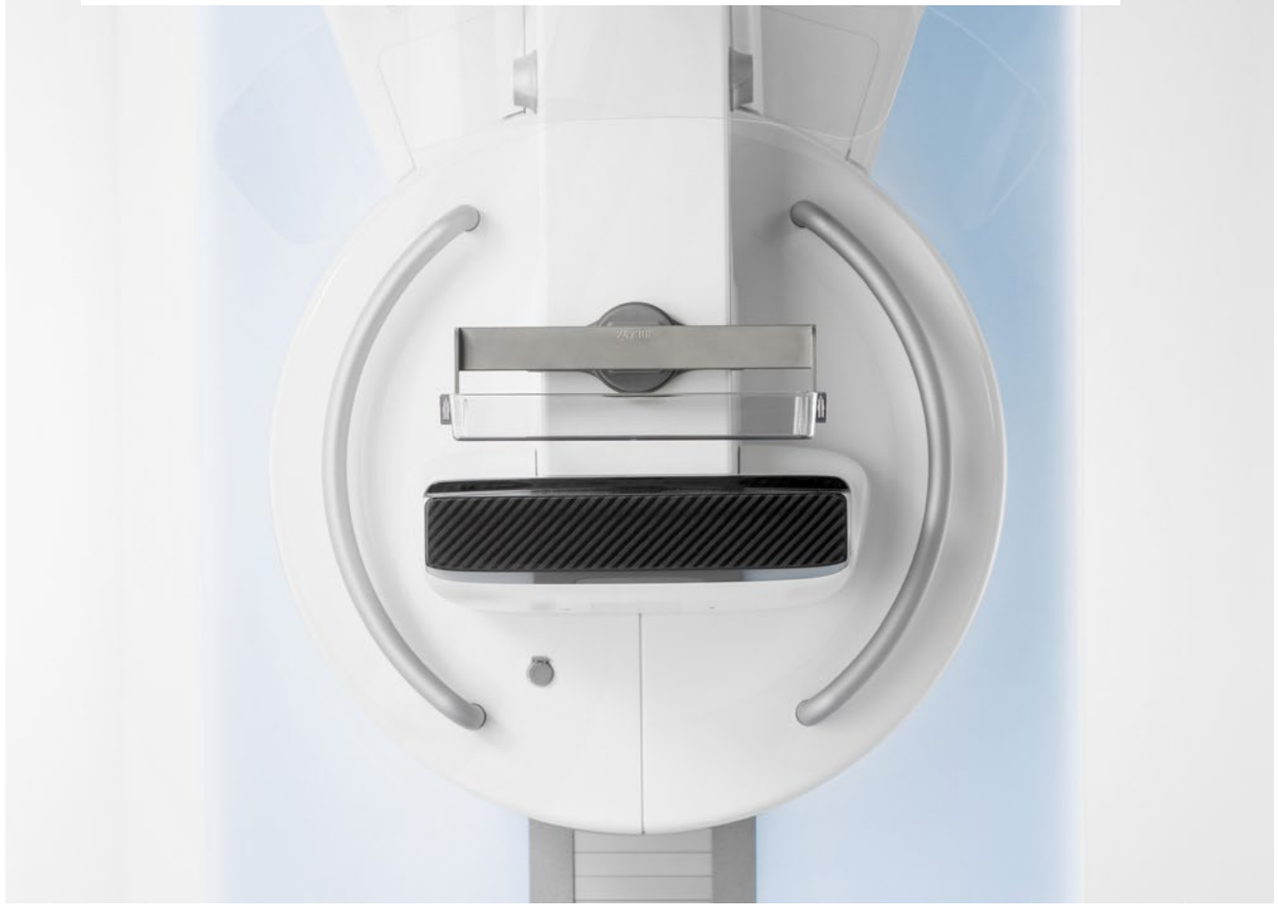
Mammomat Inspiration is a unique all-in-one system for 2D screening, diagnostics, stereotactic biopsy and True 3D Breast Tomosynthesis.

Together with *syngo*.Breast Care, regions of interest are matched to corresponding locations in any other view.

The result: expedited decision making and greater diagnostic confidence.

Mammography
Winning Combination

Images from an all-in-one system – linked to each other

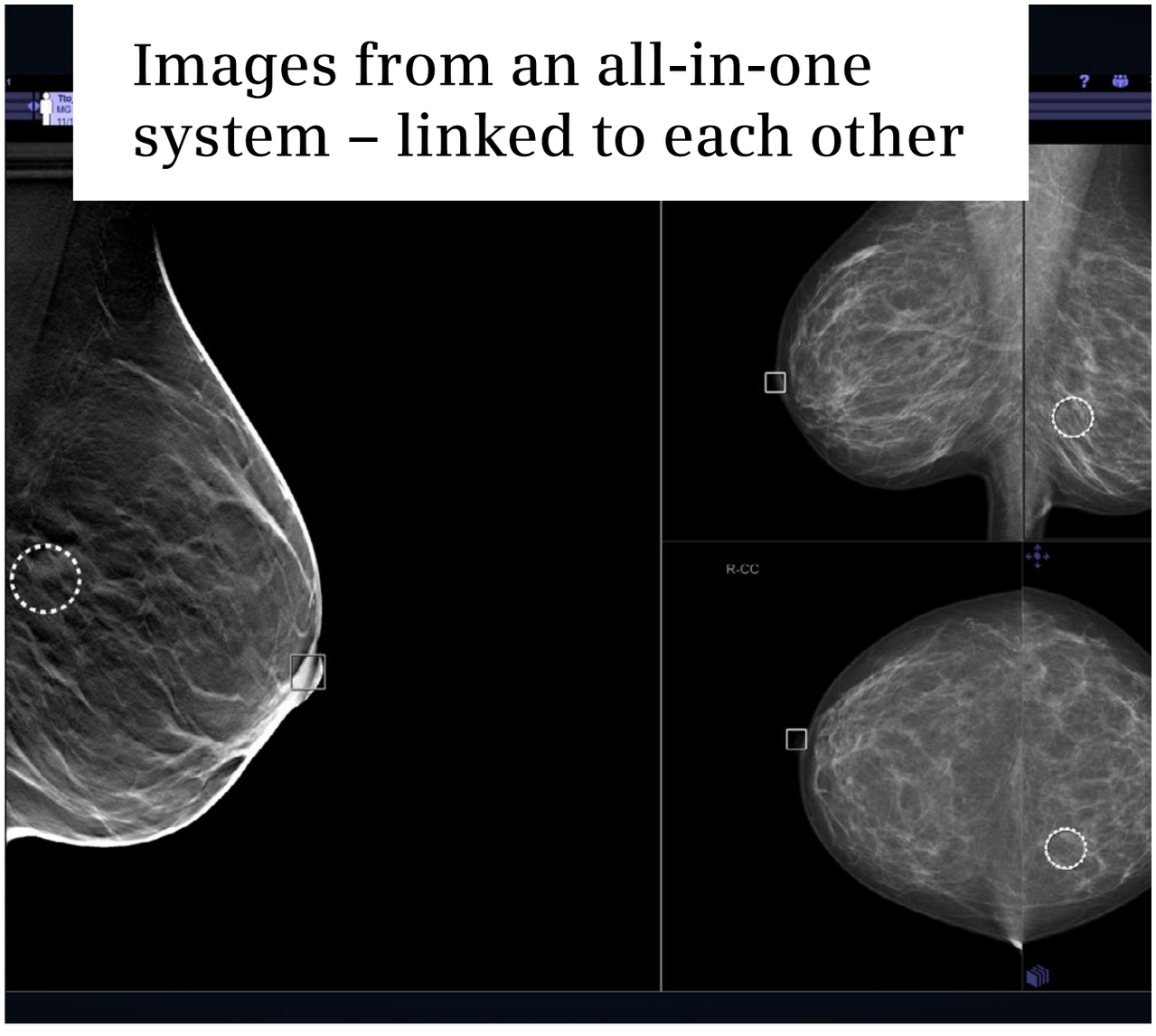


Mammomat Inspiration with True 3D Breast Tomosynthesis

You have the choice of capturing 2D or 3D tomosynthesis images, or combining both methods. All projections can be acquired within one exam – even in a single compression.

Mammography
Winning Combination

Images from an all-in-one system – linked to each other



***syngo*.Breast Care Link-it**

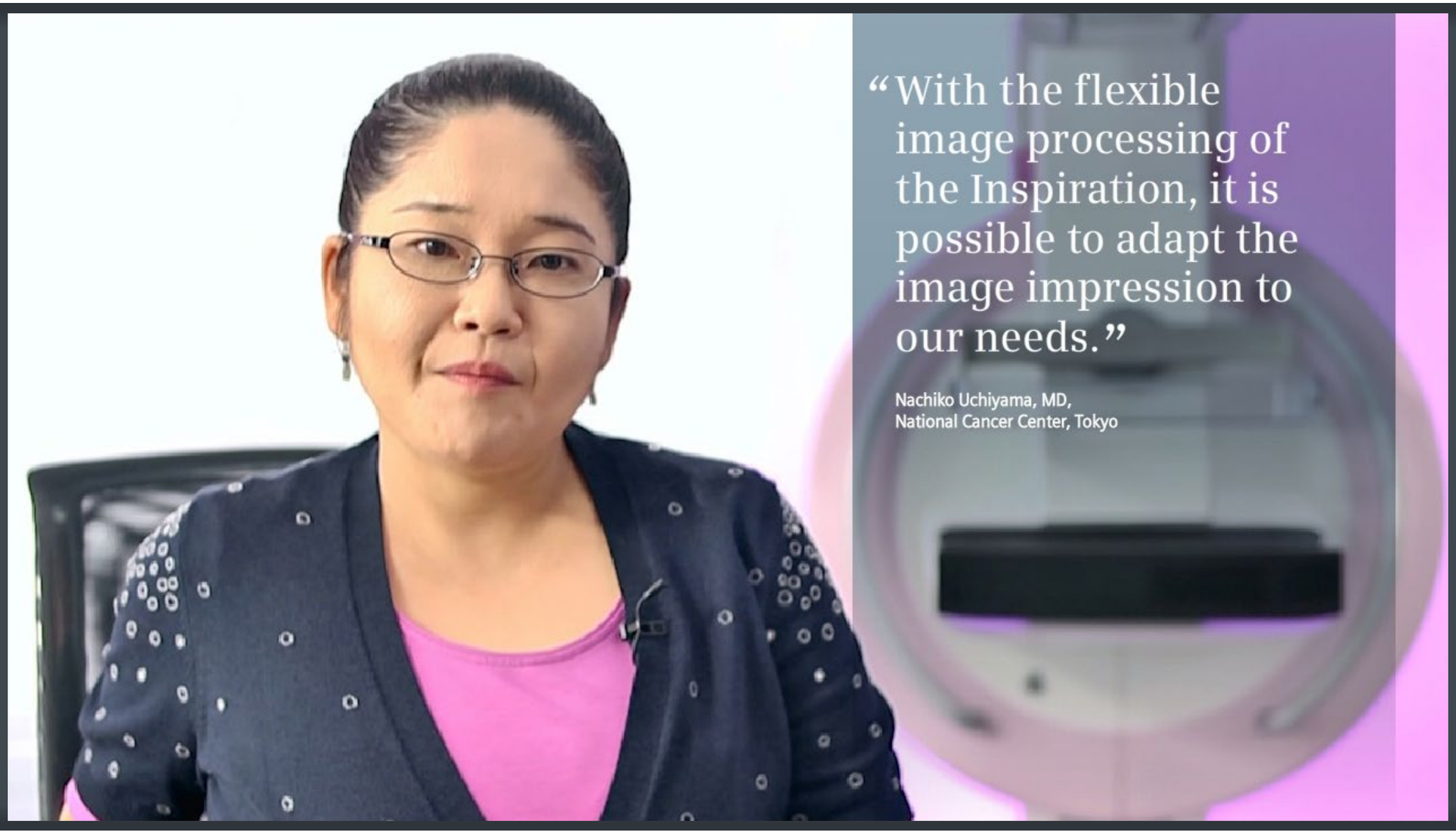
matches regions of interest to corresponding locations in any other view.

For example, it is possible to link:

- 2D CC to 2D MLO and vice versa
- 2D CC to 2D ML and vice versa
- 2D CC to 3D tomosynthesis and vice versa
- 2D MLO to 3D tomosynthesis and vice versa
- 2D ML to 3D tomosynthesis and vice versa

Mammography

What our customers are saying



The outcomes achieved by the Siemens customers described herein were achieved in the customer’s unique setting. Since there is no “typical” hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption) there can be no guarantee that others will achieve the same results.

Mammography
All applications

Mammography

- *syngo*.Breast Care CAD Display
- *syngo*.Breast Care Link-it
- *syngo*.Breast Care Reading
- *syngo*.Breast Care Tomosynthesis

Other

- Multimodality 3D Routine Reading (*syngo*.via WS/L/XL)
- *syngo*.via WebViewer

Explore all *syngo*.via applications online:
>> www.siemens.com/*syngo*.via-applications

Interventional Imaging

When it comes to interventional imaging, *syngo*.via is an ideal solution for multi-lab image management. It enables users in the interventional suite to access information from a variety of diagnostic modalities in addition to angiography images – helping them quickly gain the full picture.

>> go to Applications

Interventional Imaging
Introduction

Closing the gap between imaging and intervention

Interventional procedures – minimally invasive, image-guided therapies – require highly sophisticated imaging applications during all phases of the treatment workflow.

syngo.via enables enhanced procedural planning for effective preparation of interventions. This paves the way for high quality clinical outcomes that minimize the patient's physiological stress and toxic load.

Interventional Imaging
Clinical Engines

syngo.via enables users in the interventional suite to view a variety of diagnostic images quickly and efficiently. It also provides anywhere access to interventional images such as those produced by *syngo* DynaCT – making it ideal for distributing images. Multimodality applications “to go” allow users to access their plans and measurements wherever they need them.

syngo.Interventional Cardiology Engine
- *syngo*.Interventional Viewer
- *syngo*.Interventional QCA
- *syngo*.Interventional LVA

syngo.Interventional Cardiology Engine Pro
- *syngo*.Interventional QCABifurcation
- *syngo*.Interventional IZ3D

syngo.Interventional Radiology Engine
- *syngo*.Interventional Viewer
- *syngo*.Interventional QVA

Interventional Imaging
Clinical Applications

syngo.Interventional IZ3D
Scientifically validated 2D coronary quantification software that provides quantitative coronary vessel analysis. It is optimized for small vessels such as coronary arteries.

syngo.Interventional QCA
Scientifically validated 2D coronary quantification software which provides quantitative coronary vessel analysis, and it's optimized for small vessels like coronary arteries.

syngo.Interventional QCA Bifurcation
Provides support for bifurcation analysis in combination with the QCA package, enhancing cardiac vascular analysis.

syngo.Interventional QVA
A scientific measurement program integrated into the *syngo* Angio Viewer for objective, accurate and reproducible vessel evaluation.

syngo.Interventional LVA
A scientific measuring program integrated into *syngo*.Interventional Viewer for evaluation of the functionality of the left ventricle.

syngo.Interventional Viewer
Supports DSA viewing and high-speed review (up to 30f/s) of native and subtracted angiography images. It also enables dynamic review and post-processing of DSA scenes (in subtracted or native display).

Explore all *syngo*.via applications online:
>> www.siemens.com/*syngo*.via-applications

Clinical Specialities

Oncology

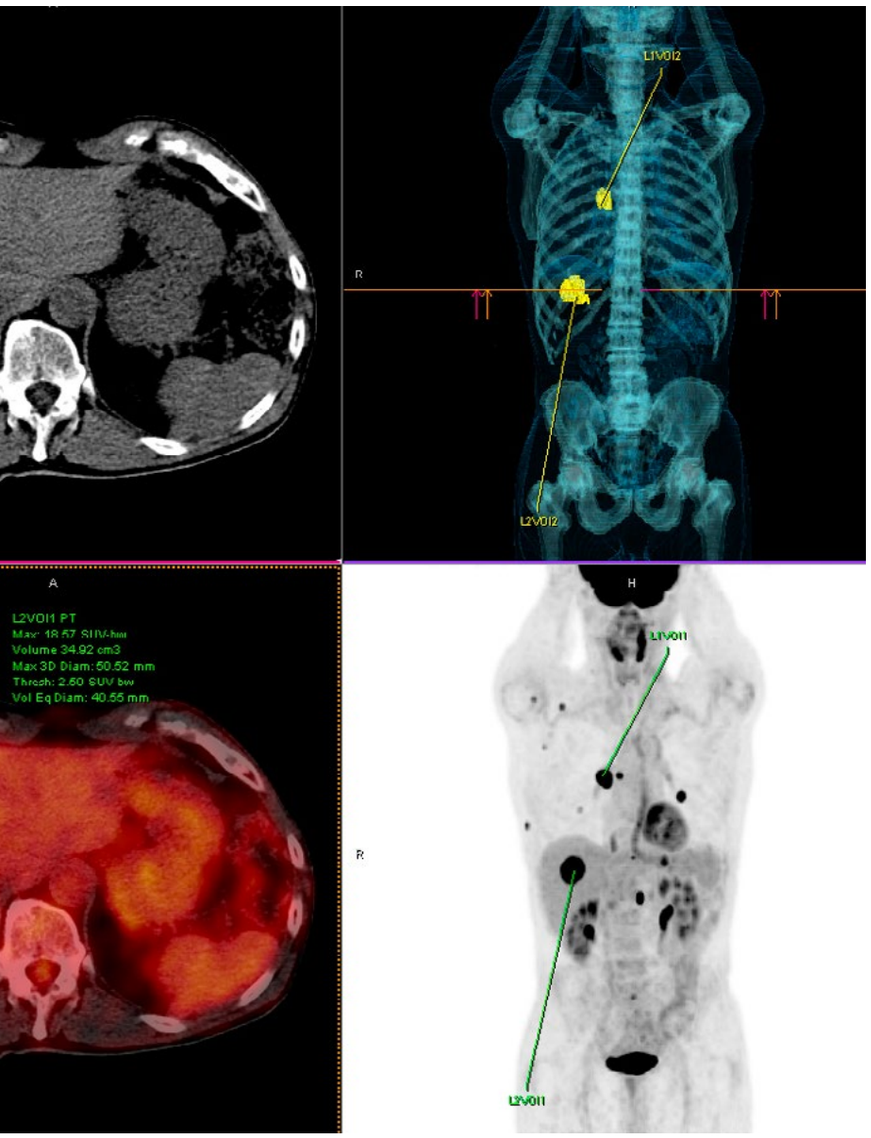
Cancer is a threat to the entire body and interdisciplinary imaging studies have become standard in oncology diagnostic evaluations. With increasing patient numbers and data volumes, you cannot afford to waste time searching for the right patient, prior studies, or the right tools. RIS/PACS workplaces are often limited to basic 2D/3D image display and are not designed for quantitative hybrid follow-up reading.

syngo.via[1] helps you master these challenges. It supports a multimodality approach, offers comprehensive advanced tools for your entire workflow, reflects and creates the necessary data flows, enables efficient follow-up comparisons, and provides interfaces that allow you to focus on what matters most – your patients.

>> go to www.siemens.com/*syngo*.via-oncology

[1] *syngo*.via can be used as a stand-alone device or together with a variety of *syngo*.via-based software options, which are medical devices on their own right. *syngo*.via and the *syngo*.via based software options are not commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

Oncology
Diagnosis



When diagnosing a patient, you want to know: Is there a tumor? Are there metastases and where? What are the respective lesion characteristics?

On up to two monitors, *syngo*.via[1] provides a seamless integration of quantitative measures, automated processes, and advanced visualization into your oncology reading workflow. For example, it combines accurate and fast lesion segmentation, RECIST 1.0 and RECIST 1.1 calculation, WHO calculation, and automated lesion finding and tracking. A number of lesion-characterizing quantitative parameters are provided[2] to fulfill clinical care as well as research requirements. The tumor growth rates and tumor burden can be calculated automatically. And you can integrate computer-aided detection (CAD) tools as a second reader to help you increase diagnostic confidence while maintaining a fast and efficient workflow.

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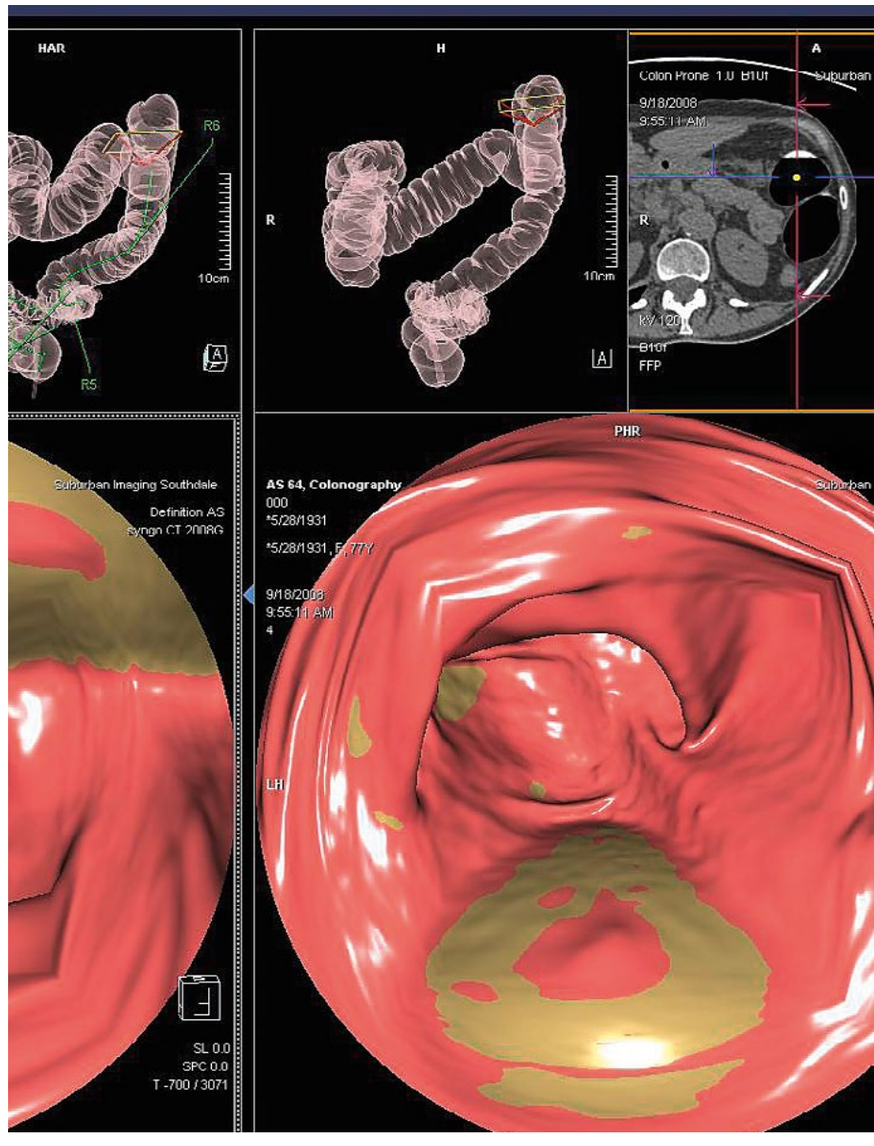
Oncology
Treatment

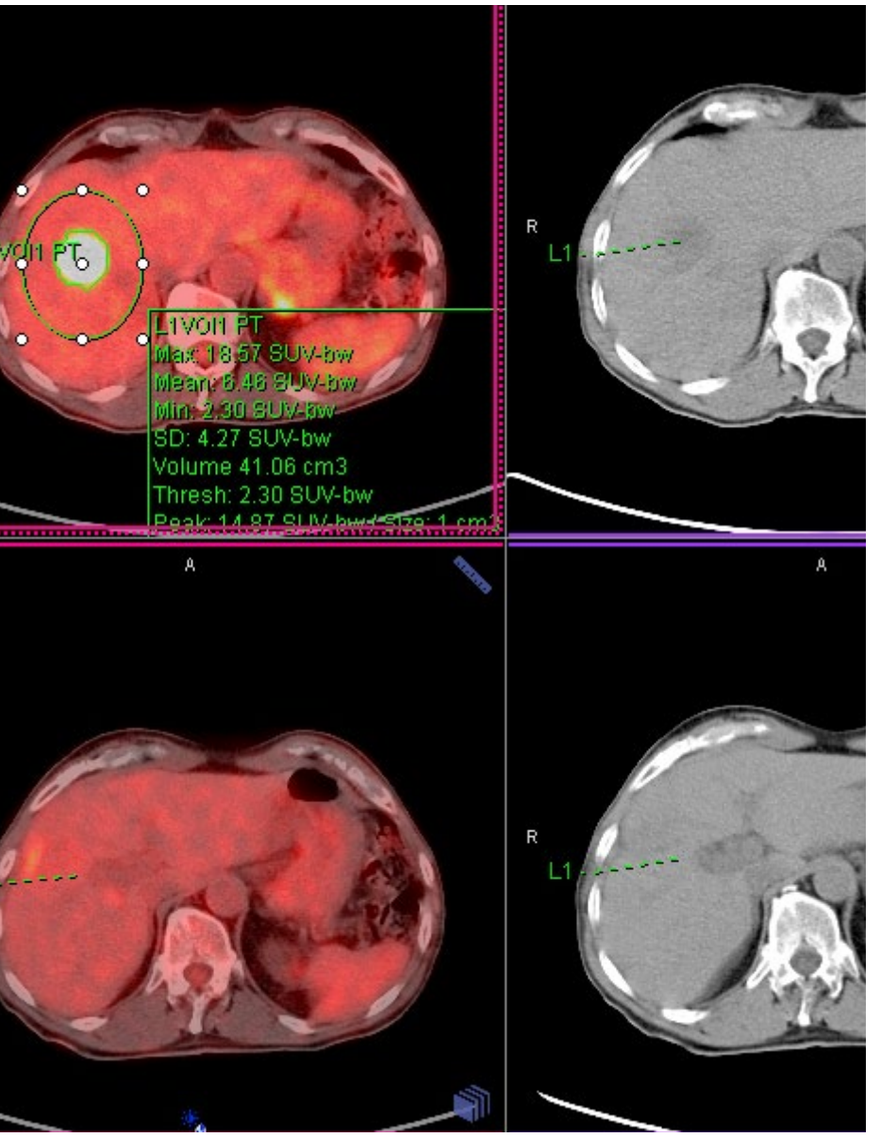
Combined with additional diagnostic parameters, imaging guides the cancer therapy. It helps you select the appropriate treatment modality and plan the treatment, be it surgery, interventional procedures, radiation therapy, chemotherapy, or a combination. It also aids therapy prognosis and can be used to monitor treatment response. *syngo*.via[1]-based applications dedicated to quantitative 3D evaluation of organs and tumors help determine the optimal amount of drugs, embolization particles, or radioactive spheres to be applied during intervention. In addition, they support access path planning and assessment of tumor feeding vessels. The *syngo*.via client-server architecture helps to ensure that pre-interventional 2D and 3D images as well as measurements and treatment planning data will be at hand in the lab where the intervention takes place. It also brings diagnostic imaging information from other diagnostic modalities directly into the interventional suite[2].

[1] *syngo*.via can be used as a stand-alone device or together with a variety of *syngo*.via-based software options, which are medical devices on their own right. *syngo*.via and the *syngo*.via based software options are not commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

[2] Usage of *syngo*.via in the interventional suite or for an emergency case requires customer to provide respective emergency measures in case of non-availability of system or network.



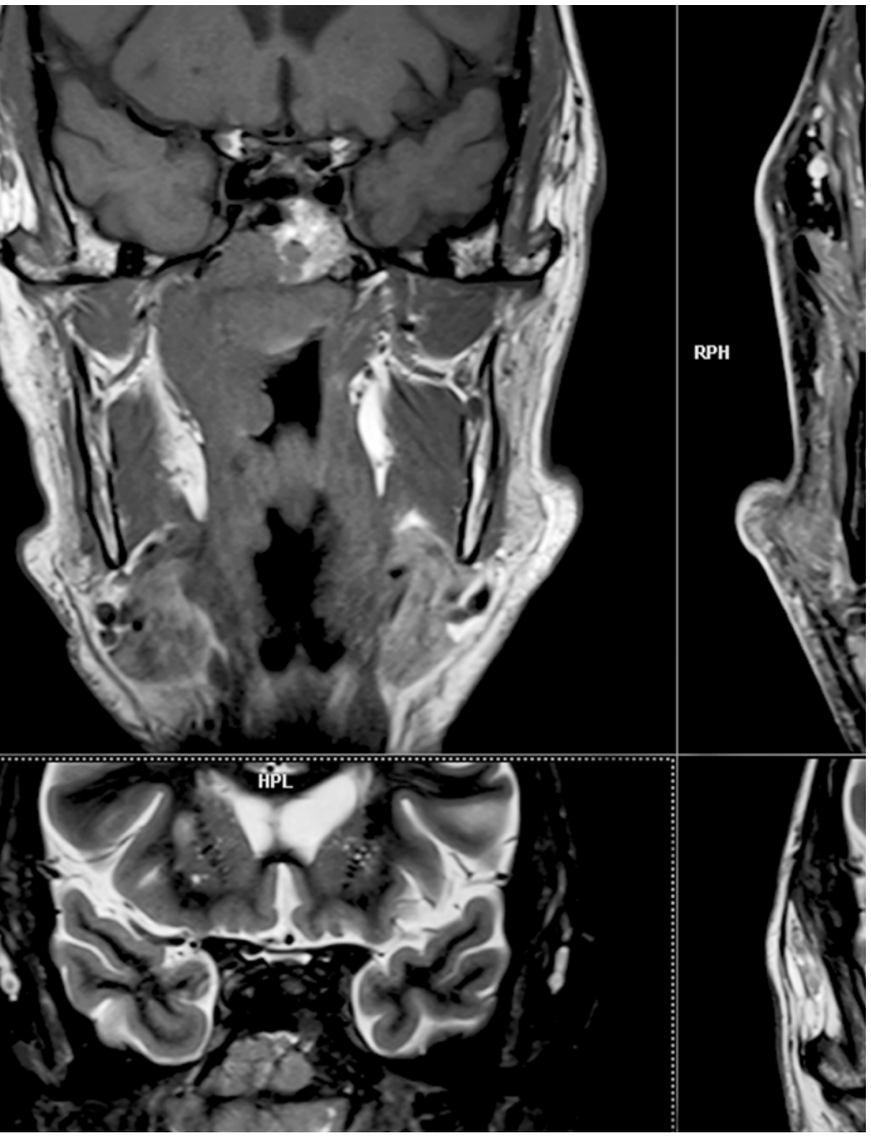
Oncology
Follow-up



What is the tumor's status? Was the therapy effective? To which extent did the tumor respond to therapy? Oncology follow-up is all about comparing cancer at different points in time. *syngo*.via's Automatic Case Preparation virtually reads your mind: It automatically gathers images from your archives and arranges them in your preferred reading layout and order.

Tumor follow-ups no longer require you to search for patients and images in databases. Current and prior studies are displayed for you immediately in your preferred layout, for a comprehensive and intuitive follow-up assessment.

Oncology
Follow-up



Findings from prior exams are automatically propagated to follow-up, and results regarding tumor growth are instantly provided within the context-specific report. Auto measurements of tumor size and volume through *syngo*.via in CT images, as well as SUV quantification on PET allow more objective measurements and a better reproducibility of results because inter-reader or intra-reader dependencies are eliminated. In addition, the tumor growth rates and tumor burden can be calculated automatically. If additional image data from MRI or PET is available for your patient, you can easily drag and drop them into your reading layout. These images will be registered automatically with the CT datasets. The anatomic registration facilitates synchronized scrolling and 3D case navigation, regardless of the slice thickness. *syngo*.via with the *syngo*.mCT Oncology[1] Engine Pro enables you to segment and quantify lesions in 3D on both PET and CT. Trending these parameters over time provides valuable information for therapy response assessment.

[1] Regulatory clearance with *syngo*.PET&CT Oncology.

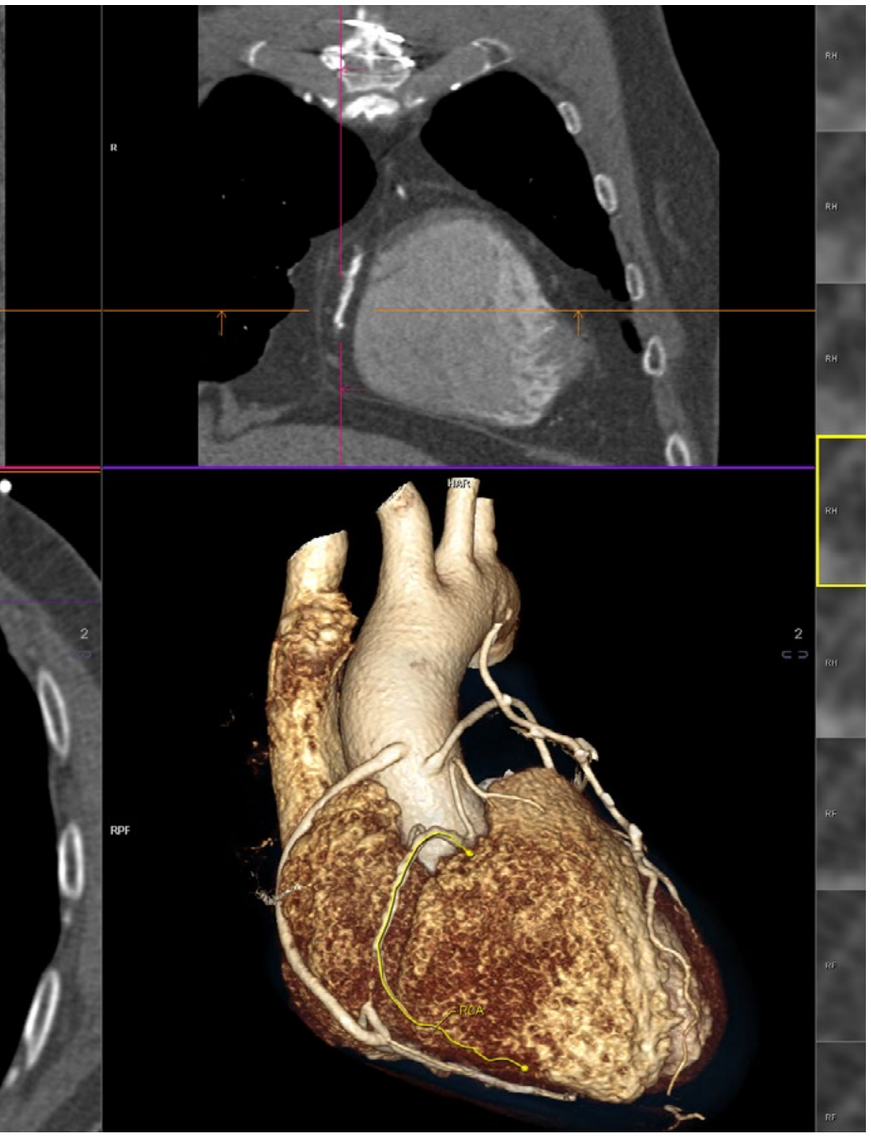
Cardiovascular

syngo.via[1] can help improve cardiovascular care as it equips you with comprehensive cardiovascular workflows and applications for evaluating images from multiple modalities. It provides you with a broad variety of automated tools and processes to enable more efficient reading in your clinical routine. Additionally, clinical workflows are also tightly integrated with RIS/PACS.

>> go to www.siemens.com/*syngo*.via-cardiovascular

[1] *syngo*.via can be used as a stand-alone device or together with a variety of *syngo*.via-based software options, which are medical devices on their own right. *syngo*.via and the *syngo*.via based software options are not commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

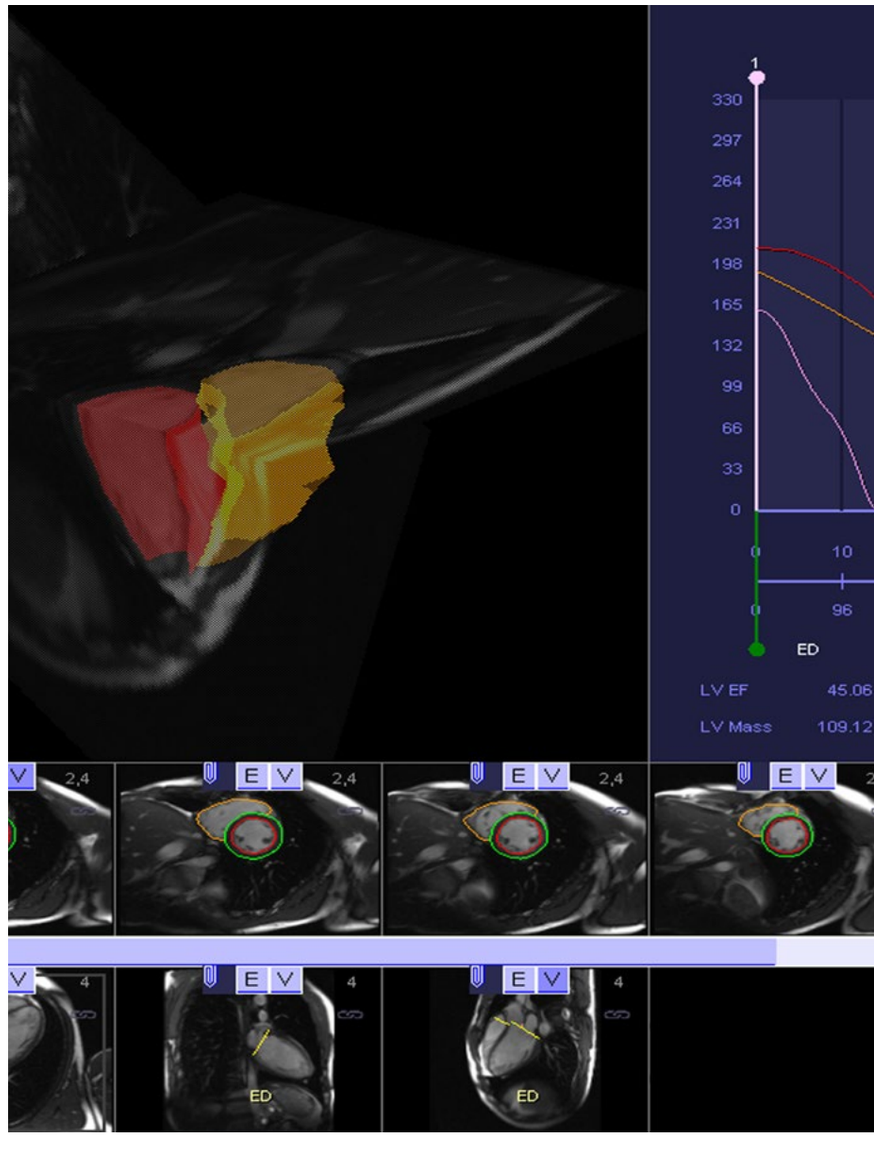
Cardiovascular
Coronary Artery Disease (CAD)



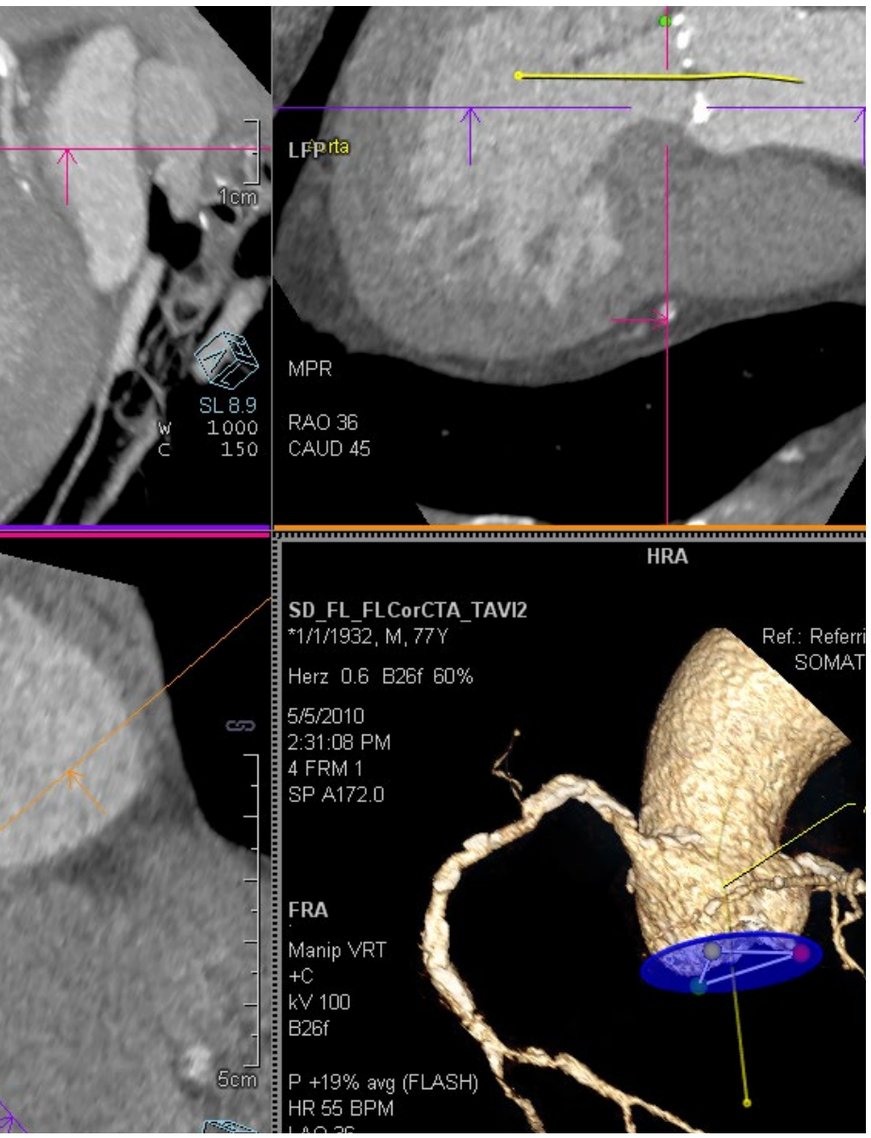
Information on the coronary status is of greatest importance for the management of patients with suspected or diagnosed Coronary Artery Disease (CAD), the largest patient group in cardiology. *syngo*.via offers you a variety of tools and applications to efficiently identify the causes during related readings and evaluations. Together they help you to quickly and confidently perform a risk assessment with CT or SPECT; rule-out CAD in less than a minute; detect even minor abnormalities in MRI exams; perform a full spectrum of myocardial perfusion analysis in SPECT, PET, and CT exams; simplify reading and analysis of cardiac MRI examinations; benefit from optimalized assistance for stent planning and evaluation of stent patency.

Cardiovascular
Heart Failure

Heart failure is a syndrome that may be caused by other heart diseases such as coronary artery disease or different forms of cardiomyopathies. Its treatment depends on the underlying disease. Therefore, finding the cause of heart failure and exact diagnosis and follow-up are a must to assure optimized treatment. *syngo*.via and its software options help you to carry out ventricular analysis of MRI data comprehensively; perform low-dose evaluations of ischemia or cardiomyopathy with CTA; assess left ventricular function within XA studies quickly and intuitively; easily decide on revascularization based on PET myocardial viability examinations.



Cardiovascular
Valvular Heart Disease

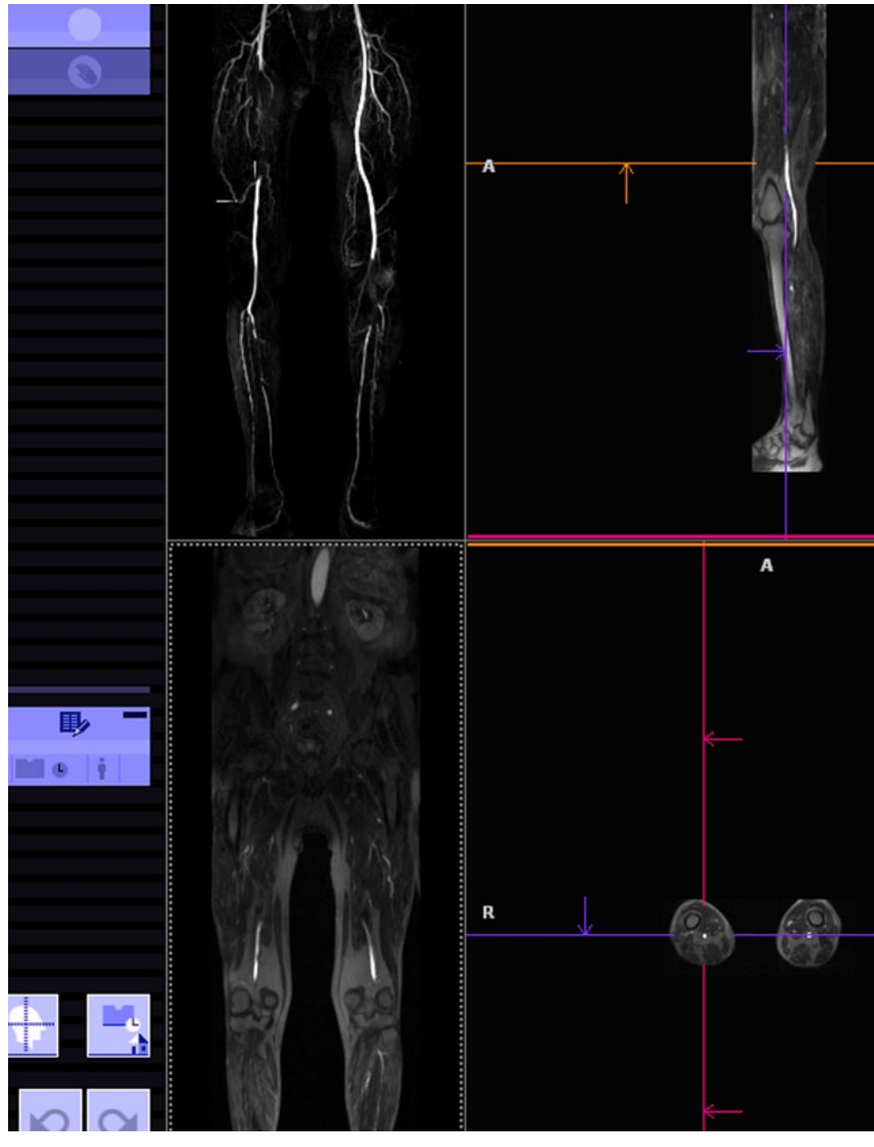


Imaging is key in assessing suspicions of valvular heart disease such as valvular stenosis or valvular insufficiency, grading the disease, deciding on the treatment of choice to prevent manifestations of heart failure, and conducting treatment planning and evaluation. *syngo*.via and *syngo*.via applications support you in streamlined CT TAVI planning, and quick and easy evaluations of blood flow dynamics with MRI.

Cardiovascular
Vascular Disease

In addition to diseases of the heart, cardiovascular care also covers the management of diseases of the great vessels like aortic dissection or pulmonary embolism. Furthermore, cerebrovascular disease or peripheral artery disease often manifest in CAD patients.

For vascular reading, you need not only visualizations of the vessel lumen, but also analysis of the vessel wall. Additionally, you need accurate information to guide the treatment decision and evaluate its sustainable success. *syngo*.via provides powerful applications and functions to help you leverage your potential: Fast and comprehensive triple rule-out when every second counts; guidance for AAA stent planning; dynamic vessel evaluation, extended phase handling, and advanced bolus analysis; full advantage of information from MR angiography; accurate and reproducible vessel evaluation in XA studies.



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