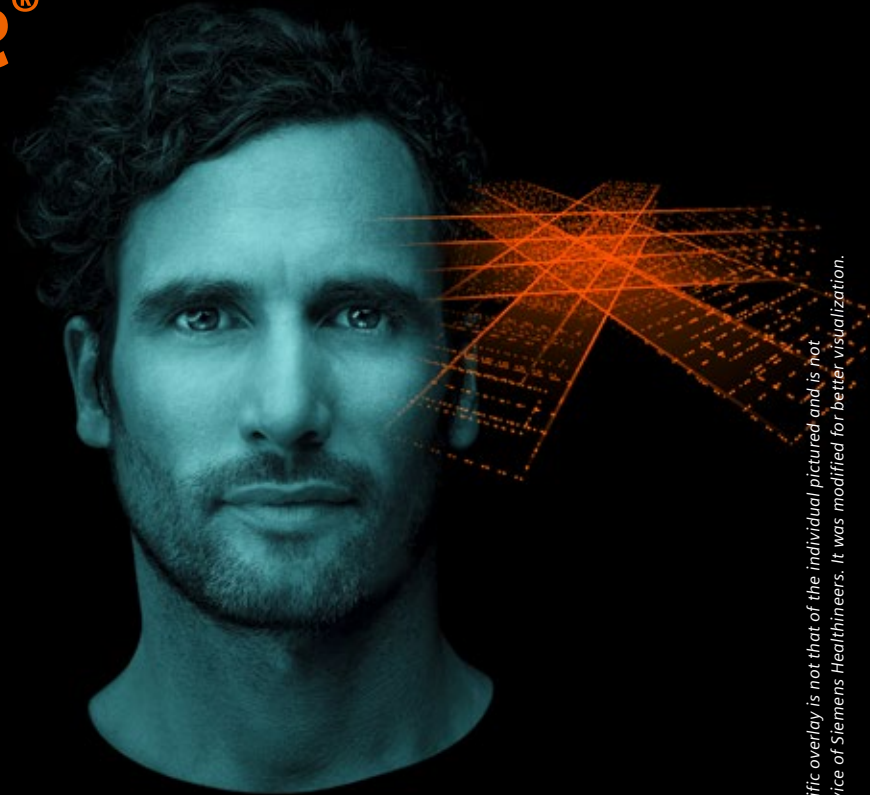
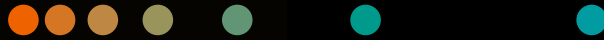


SOMATOM Confidence[®] RT Pro Edition

siemens-healthineers.com/CT-for-RT



The scientific overlay is not that of the individual pictured and is not from a device of Siemens Healthineers. It was modified for better visualization.

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SOMATOM Confidence[®] RT Pro Edition

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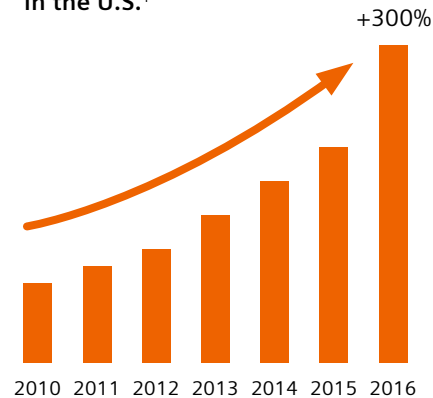




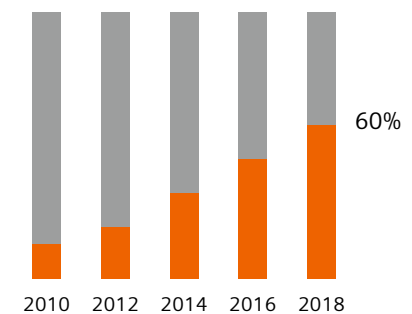
Radiation therapy in a dynamic healthcare environment

Like many other areas in healthcare, radiation therapy is a dynamic and fast-changing clinical specialty. In recent years, topics such as precision medicine, increasing curative intent, and hypofractionated treatments have become increasingly relevant. In the USA, adoption of stereotactic body radiotherapy (SBRT) has grown significantly over the last few years. And more and more institutions plan to provide stereotactic radiosurgery (SRS) in the future.

Adoption of SBRT in the U.S.¹



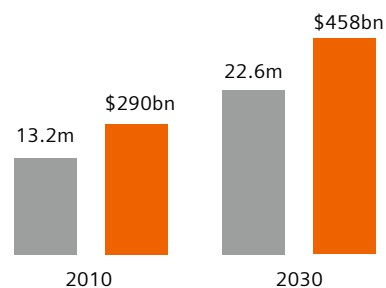
RT institutions in the U.S. planning to provide SRS¹



At the same time, the cost of therapy and the percentage of patients receiving radiation therapy are continuously rising. All of this drives the need for solutions that improve care, while reducing costs.

Imaging plays a vital role in this – and its importance will steadily grow as treatment delivery techniques continue to advance. It is a key enabler of clinical excellence in RT, both today and into the future, to give you precision as the starting point of treatment.

Increase in cancer cases and their costs²



- New cancer cases
- Their costs

Percentage of cancer patients receiving radiation therapy³



Up to 2/3
of cancer patients receive radiation therapy.



“The advances in treatment technology are driving the need for advanced imaging. Imaging can make a difference – not only for you as healthcare provider, but also for your patients. With our solutions, we want to help you be at the forefront of progress in radiation therapy.”

Gabriel Haras, Head of Radiation Oncology, Advanced Therapies

A healthcare professional in pink scrubs is adjusting a patient on a Siemens Healthineers CT scanner. The patient is lying on the scanner bed, wearing blue pants and a white shirt. The professional is holding a control panel. The scanner is white with an orange stripe and the Siemens Healthineers logo. A robotic arm is visible in the foreground on the right.

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Blaze a new trail in RT

There is a significant market development toward advanced treatment techniques and, simultaneously, more standardized and personalized care. These goals require precision in the entire RT department. For CT in RT, a significant challenge in contributing to this precision lies in fulfilling the needs of two different end users: Radiation oncologists and dosimetrists.

In order to address these needs, Siemens Healthineers developed SOMATOM Confidence® RT Pro. As a dedicated CT scanner for RT, it delivers images that are optimized for both contouring and dose calculation. And it offers a smooth workflow that helps reduce sources of errors and bring together standardization and personalization.



LAP DORADOnova

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SOMATOM Confidence

Your benefits at a glance

SOMATOM Confidence® RT Pro means no more compromise between efficiency and personalization in imaging for RT. Delivering precision for all RT patients, SOMATOM Confidence® RT Pro gives you the tools to reach beyond your current capabilities. Face present and future RT challenges with confidence – whether you want to optimize your current practices or explore new ones.

Blaze a new trail in RT.



Bring together standardization and personalization

SOMATOM Confidence® RT Pro features a unique algorithm called DirectDensity^{4,5}, which unlocks a wider range of kV settings. Only one calibration curve is needed in the treatment planning system, enabling users to truly personalize images at no cost to workflow.



Pioneer modern treatment preparation

Modern RT treatment preparation with CT requires utmost precision from multiple end users: radiation therapists, dosimetrists, physicists, and oncologists. SOMATOM Confidence® RT Pro optimally supports each of these clinical roles: for confident imaging, contouring, and dose calculation – and a focus on precision along the entire RT workflow.



Boost your workflow

SOMATOM Confidence® RT Pro is designed to both standardize and personalize the RT imaging workflow. With an easy-to-use interface, scan selection, and respiration breathing curve monitoring, the touch panels can improve your workflow and allow you to stay closer to your patients.



Bring together standardization and personalization

SOMATOM Confidence® RT Pro delivers a unique new feature that simplify the current practice of CT calibration and Hounsfield unit (HU) conversion: DirectDensity^{4,5}.

Calibration curves and standardization

In radiotherapy, the HU values of the CT image need to be converted to electron density or mass density in order to perform dosimetric planning. When CT images are acquired at different kV settings, users need to select the appropriate HU-to-electron density calibration curves in the Treatment Planning System (TPS) when performing dosimetry. To simplify the process, users generally do CT imaging at 120 kV, regardless of patient size or cancer type. This reduces the number of calibration curves down to just one.

“The ability to acquire direct electron density images simplifies the current practice by eliminating CT calibration and HU conversion from commissioning and treatment planning, respectively. Furthermore, it unlocks a wider range of tube voltages in CT scanners for better imaging quality while maintaining similar dosimetric accuracy.”

Tianyu Zhao, PhD, Assistant Professor in Radiation Oncology,
Washington University School of Medicine,
Department of Radiation Oncology, St. Louis, MO, USA

Personalized kV settings

Consistently scanning at 120 kV ensures standardization and simplicity for dose calculation. However, it is not ideal for contouring. Applying 120 kV to every examination – whether imaging a child or an obese patient – does not deliver patient-optimized image quality. Because imaging results can vary significantly depending on the kV value applied, the personalization of tube voltage can go a long way in optimizing images for contouring.

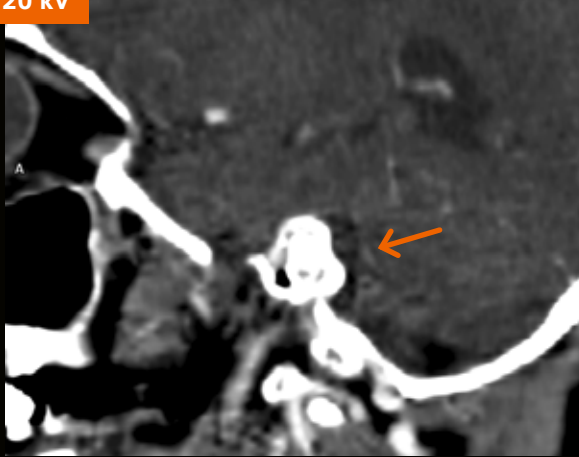
Unlock new potential with DirectDensity^{4,5}

Bringing together standardization and personalization, SOMATOM Confidence® RT Pro introduces DirectDensity^{4,5} – an exclusive reconstruction algorithm that generates images representing relative electron density and/or mass density values. Therefore, with DirectDensity^{4,5} images of any kV value can be used in the TPS without the need and complexity of several calibration curves.

120 kV may not always deliver the optimal image for contouring. Depending on the patient, lower or higher kV values can significantly improve image quality. With DirectDensity^{4,5}, you can personalize CT tube voltage to the value that best fits the patient.

To give you even more options, DirectDensity^{4,5} can be combined with other applications, such as iMAR⁴ (iterative Metal Artifact Reduction) to reduce metal artifacts, SAFIRE⁴ to reduce noise, and others.

120 kV



Acoustic neuroma with cardiac pacemaker⁶
on SOMATOM Sensation Open

Tube voltage: 120 kV
Collimation: 24 x 1.2 mm
Scan time: 24 s
CTDI vol: 55.99 mGy
DLP: 2091.39 mGy*cm

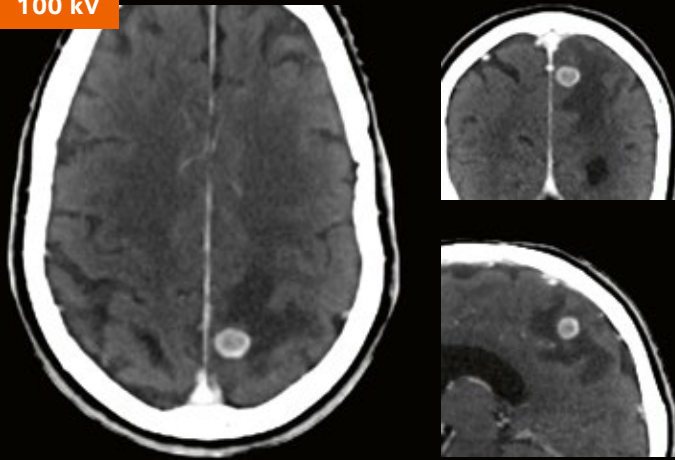
80 kV



Acoustic neuroma with cardiac pacemaker⁶
on SOMATOM Confidence[®] RT Pro with DirectDensity^{4,5}

Tube voltage: 80 kV
Collimation: 40 x 0.6 mm
Scan time: 22 s
CTDI vol: 22.53 mGy
DLP: 399.0 mGy*cm

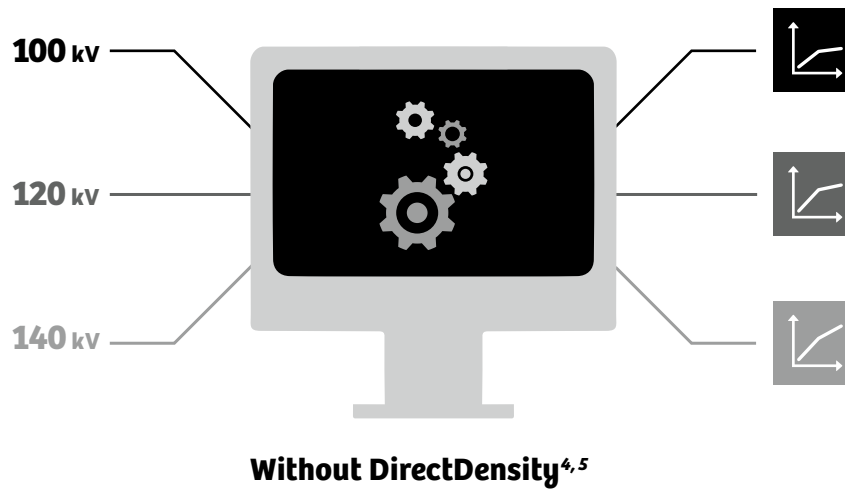
100 kV



Brain metastasis on SOMATOM Confidence® RT Pro with DirectDensity^{4,5}

Tube voltage: 100 kV
Collimation: 64 x 0.6 mm
Scan time: 18 s
Pitch: 0.8

Scan time: 17 s
Rotation time: 1.0 s
Eff. mAs: 539 mAs



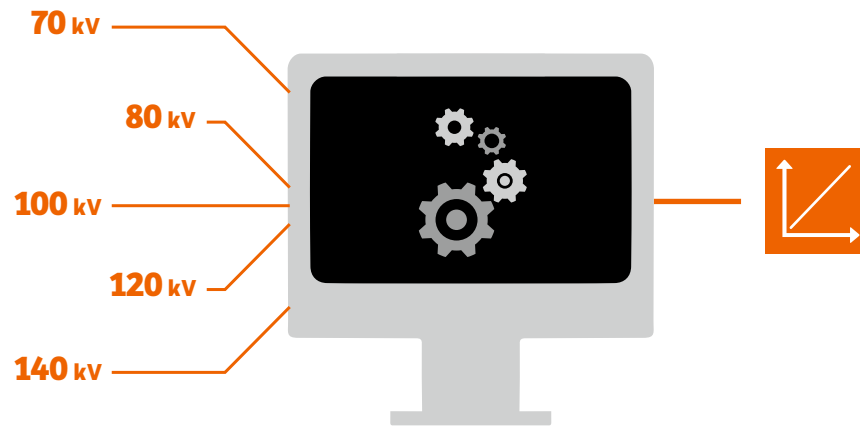
Benefits of DirectDensity^{4,5}

By removing calibration and HU conversion from the procedure, DirectDensity^{4,5} simplifies the current practice. At the same time it unlocks a wider range of kV settings for better and more personalized image quality, at the same time supports increased stability of density estimation in regards to geometric variations.

With DirectDensity^{4,5} you can use the full potential of patient-specific CT acquisition – allowing you to adapt tube current and voltage to the patient anatomy.

To optimize CT protocols in busy radiotherapy departments, you can combine DirectDensity^{4,5} with CARE kV⁷ for automatic adjustment of exam-specific kV and scan parameters.

Enabling the use of various kV settings with only one calibration curve, DirectDensity^{4,5} helps to maintain consistency in dose calculation.



With DirectDensity^{4,5}

Where standardization meets personalization

With DirectDensity^{4,5}, you can fulfill the need for both standardization and personalization: standardizing best practices in order to deliver effective, safe, and affordable care, while adapting to individual patients or cancer types.

DirectDensity^{4,5} in a nutshell

DirectDensity^{4,5} delivers CT values that can be interpreted as showing relative electron density and mass density. This is achieved by combining image-based bone detection with a projection-based material decomposition. The two-material decomposition of water and bone helps to generate synthetic projections of relative electron density and/or mass density. DirectDensity^{4,5} images are reconstructed from these projections.

For more information, please refer to our white paper "DirectDensity^{4,5} – Technical principles and implications for radiotherapy."

It is available for download at [siemens-healthineers.com/somatom-confidence-rt-pro](https://www.siemens-healthineers.com/somatom-confidence-rt-pro)

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Pioneer modern treatment preparation

SOMATOM Confidence® RT Pro is designed to deliver the precision that is needed for modern treatment preparation, both for confident contouring and dose calculation.

Two different end users

As radiation oncology treatment techniques are advancing, it is crucial for RT departments worldwide to attain the required precision. CT imaging in RT must, of course, contribute to this precision. This is not an easy task, considering that these CT images have to fulfill the needs of two different end users: radiation oncologists and physicists. In other words, CT imaging in RT must enable precision for both contouring and dose calculation.

“Contouring is important because any error will be carried forward through the patient’s treatment plan – and we want to reduce any uncertainty with good image quality.”

Allen Li, PhD, Professor and Chief of Medical Physics
Medical College of Wisconsin, Department of Radiation
Oncology, Milwaukee, USA

Optimally engineered for image quality

To address this need, SOMATOM Confidence® RT Pro is optimally balanced for excellent image quality. We found this balance in a bore size of 80 cm and an 80 kW power generator – combined with state-of-the-art technology.

Precision in the image

SOMATOM Confidence® RT Pro includes iMAR⁴ for metal artifact reduction, SAFIRE⁴ and ADMIRE⁴ for reduced noise to aid in better contouring, and HD Field of View Pro for visualization of the human body parts and skin line located outside of the 50 cm standard scan field of view up to the bore size.⁸ In addition, it features a newly developed detector for minimized electronic noise and an extended dynamic range. Equipped with these features, SOMATOM Confidence® RT Pro delivers highly precise CT images for confident contouring.

Modern treatment preparation

With SOMATOM Confidence® RT Pro there is no need to compromise between precision in the image and precision in the workflow. Enabling modern treatment preparation both for radiation oncologists and physicists, it therefore paves the way toward advanced treatment techniques – so you are equipped for the latest procedures and future developments.

Precise reduction of metal artifacts with iMAR⁴

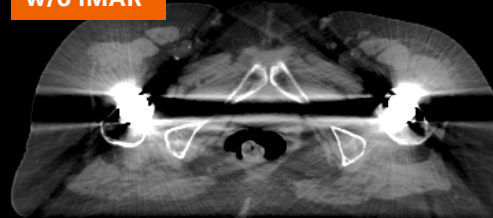
iMAR⁴ is a metal artifact reduction algorithm based on adaptive sinogram mixing. It delivers reduction of artifacts from metal, even for challenging cases like spine and hip implants, pacemakers, dental fillings, and neuro coils.

Prostate patient with hip implants

Tube voltage: 120 kV
Collimation 16x1.2
Slice Thickness 2 mm
Rotation time 1.0

Scan time: 23 sec
SL: 354 mm
Eff. mAs 143

w/o iMAR⁴



with iMAR⁴

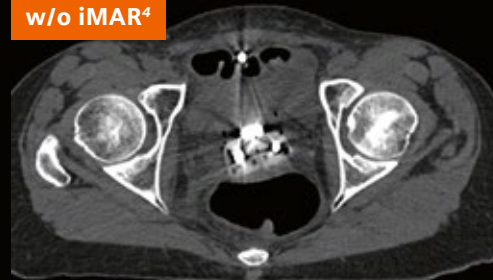


Visualization of applicators in brachytherapy patient

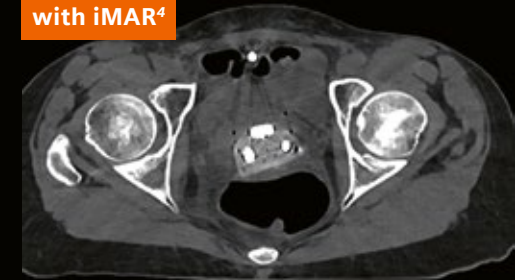
Tube voltage: 120 kV
Collimation: 64 x 0.6 mm
Scan time: 17 s

Rotation time: 1.0 s
CTDI vol: 24.76 mGy
DLP: 737.6 mGy*cm

w/o iMAR⁴



with iMAR⁴

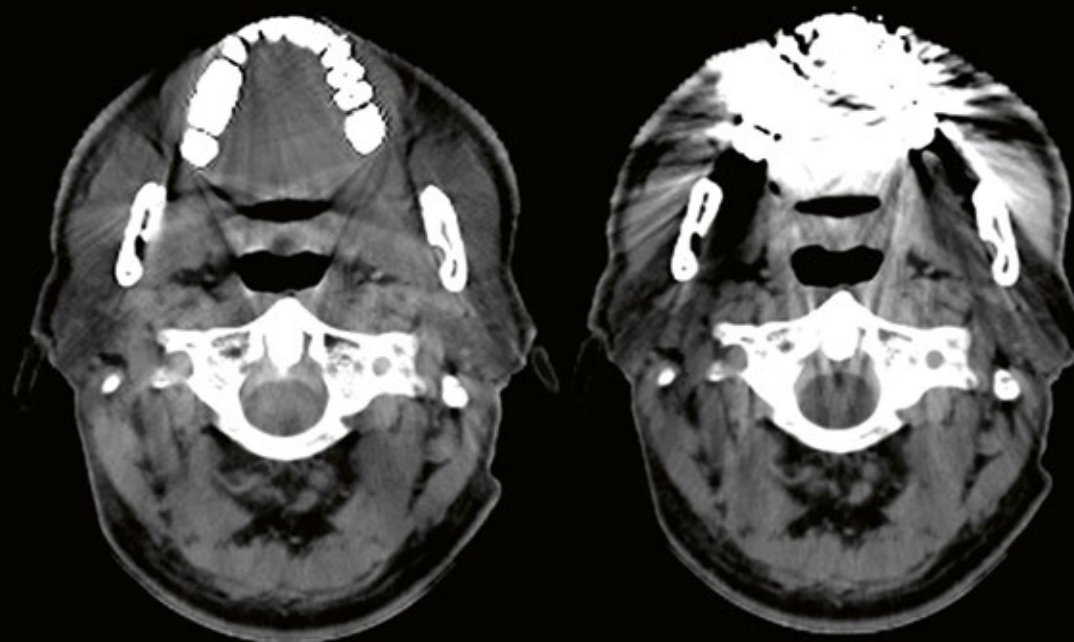


Courtesy of MAASTRO Clinic, Maastricht, The Netherlands

**Head and neck patient with strong
metal artifacts due to dental fillings**

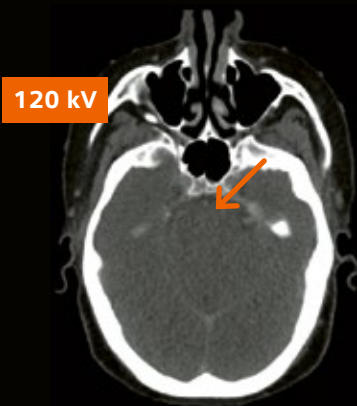
Tube voltage: 120 kV
Collimation: 64 x 0.6 mm
Scan time: 14 s

Rotation time: 1.0 s
SL: 3 mm
Eff. mAs: 289 mAs



Broaden your application spectrum with Dual Energy⁴

SOMATOM Confidence[®] RT Pro allows you to access the world of Dual Energy⁴ and improve visualization. The images acquired with two photon spectra can be manipulated for various purposes, such as reducing artifacts or better characterizing different tissues.

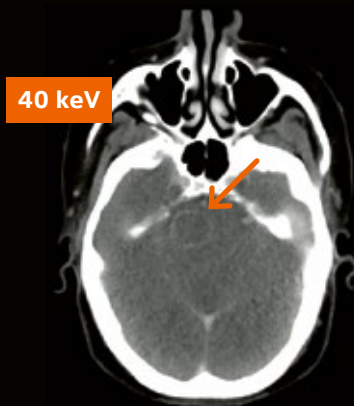


120 kV

Single-energy acquisition

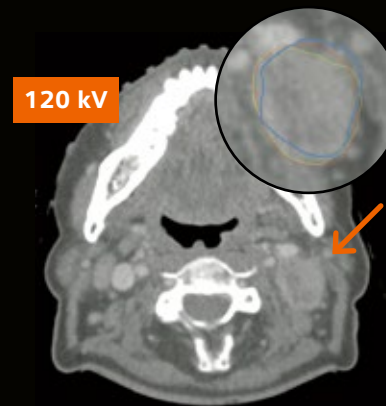
Brain cancer
Eliminate guesswork in target delineation with Dual Energy Monoenergetic Plus⁴ low keV imaging

Tube voltage: 80/140 kV
Collimation: 64 x 0.6 mm
Rotation time: 0.5 s



40 keV

Dual Energy acquisition

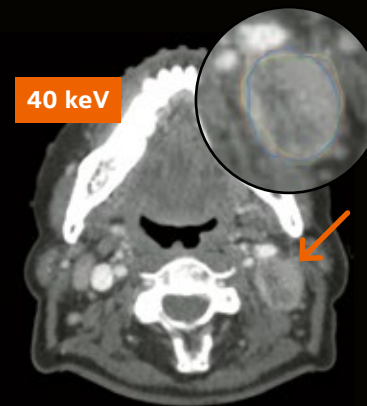


120 kV

Single-energy acquisition

Head and neck cancer: Tumor enhancement
Dual Energy Monoenergetic Plus⁴ low keV imaging can potentially reduce variations in target delineation independent of the operator

Tube voltage: 80/140 kV
Collimation: 64 x 0.6 mm
Rotation time: 0.5 s



40 keV

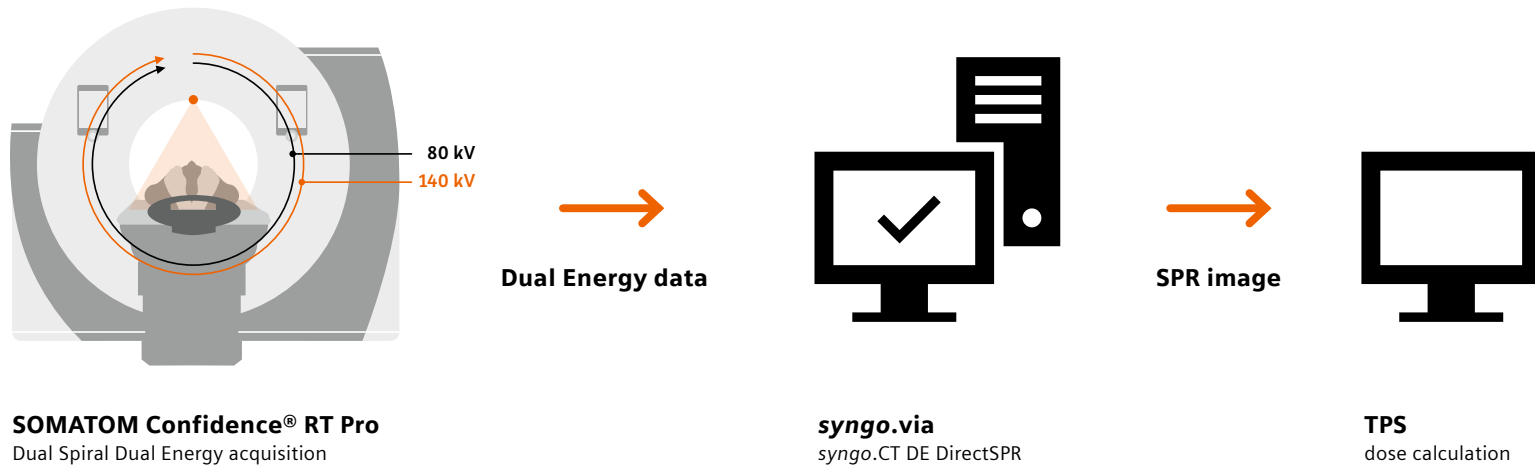
Dual Energy acquisition

DirectSPR^{4,12}

Addressing your challenges in Particle Therapy

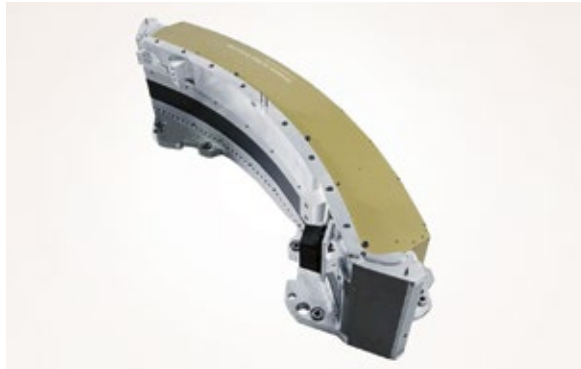
Positively impact treatment planning in particle therapy by using DirectSPR^{4,11} making Stopping Power images directly available for dose calculation.

- Enables accurate and automated SPR calculation
- Automatically takes into account patient diameter variation in z-direction to eliminate the need for different HLUTs.
- Differentiate the SPR value of materials that have the same CT value in single energy images.
- Generates CT DICOM modality images so that they can be exported into a TPS.



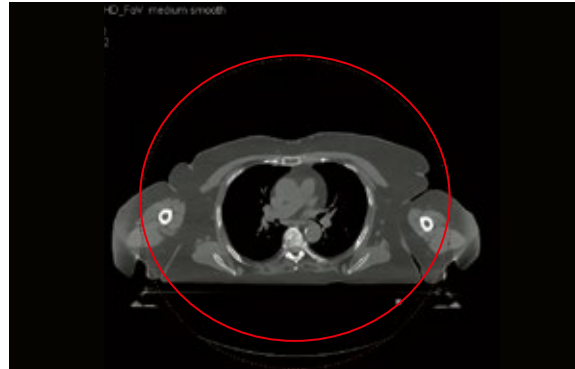
How it works

Take a closer look at the features that enable precise treatment preparation.



Redefine image quality with the new Stellar RT detector

SOMATOM Confidence® RT Pro redefines image quality with the new Stellar RT detector, a dedicated 2 cm version of Siemens Healthineers' first fully integrated Stellar detector with TrueSignal and HiDynamics technologies. Electronic components such as microchips, conductors, etc., are integrated directly in the photodiode. This reduces electronic noise coming from detector elements and thus significantly improves the signal-to-noise ratio (SNR) for optimized dose efficiency and image quality.



Improve visualization with HD FoV^{4,8}

Designed to enable visualization of the human body parts and skin line located outside of the 50 cm standard scan field of view up to the bore size, based on the algorithmic complement of missing detector data outside of the 50cm standard scan FoV.

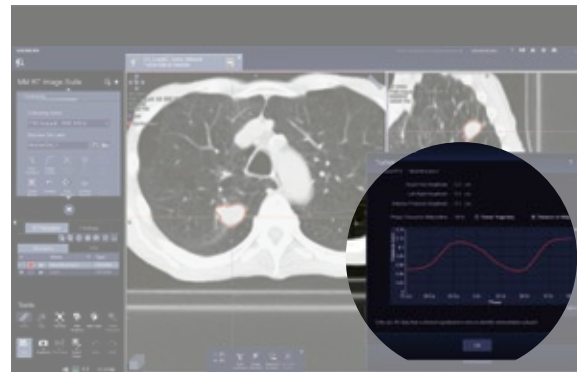


Reduce noise and improve resolution with SAFIRE⁴ and ADMIRE⁴

SAFIRE^{4,9,10} iterative reconstruction brings major benefits to image quality, particularly in challenging situations such as 4D respiratory-gated studies or large-patient studies. In general, these types of studies can produce noisy images – SAFIRE⁴ can significantly improve the quality of the images in such studies. In addition, SAFIRE⁴ preserves HU accuracy, linearity, and spatial resolution, leading to superior images for accurate treatment planning. ADMIRE^{4,9} – our most advanced iterative reconstruction technique – takes iterative reconstruction for RT even one step further. Studies reconstructed with ADMIRE⁴ show higher resolution at organ borders and improved delineation of edges.

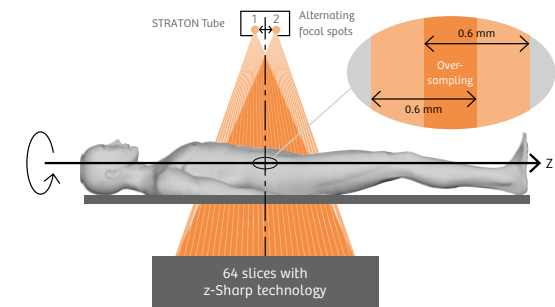


Comprehensive tumor motion management⁴
 SOMATOM Confidence[®] RT Pro provides a full-fledged motion management solution for both retro- and prospective gating, and includes the option to connect different external gating devices. Thanks to FAST 4D¹¹, our 4D-guided workflow brings efficiency to RT routines by automatically setting the optimal scan parameters based on the patient's breathing cycle. In addition, with DirectBreathhold^{4,12} the CT acquisition is automatically triggered based on the patient's respiratory signal which reduces user interaction and facilitates DIBH acquisition at the CT scanner.



Managing motion is key to personalizing treatments.
 In order to minimize toxicity to healthy tissue, it is crucial to target the tumor accurately. *syngo.via* RT Image Suite⁴ opens the door for new treatment strategies with Mid-Ventilation⁴. Comprehensive treatment decisions thanks to quantitative assessment of 3D tumor trajectory and amplitude as well as semiautomatic calculation of the mid-ventilation phase.

Courtesy of MAASTRO clinic, Maastricht, Netherland



Secure your investment with 64 slices⁴
 For even more accuracy, SOMATOM Confidence[®] RT Pro can be field-upgraded to 64 slices⁴. This gives you overlapping slices for high spatial resolution, even off-center and independent of pitch. With 0.3 s⁴ rotation speed and a 100 kW⁴ generator, SOMATOM Confidence[®] RT Pro is not only future-ready, it can also be used as a backup scanner for radiology.



Boost your workflow

SOMATOM Confidence® RT Pro is designed for efficiency and error avoidance to advance precision in your RT workflow.

Two important success factors

Like other clinical specialties, the radiation therapy community strives for a middle ground between improving efficiency and increasing patient satisfaction. Cost pressure, competitive pressure, and better informed patients make efficient operations and satisfied patients crucial for an RT department's success. For many users, however, these two goals seem mutually exclusive – but they don't have to be.

“Radiation therapy is a long and complicated process; every step in the process is a potential source of error.”¹³

Christopher F. Njeh, Radiation Physicist,
Community Medical Centers, Fresno, CA, US

Optimized workflow

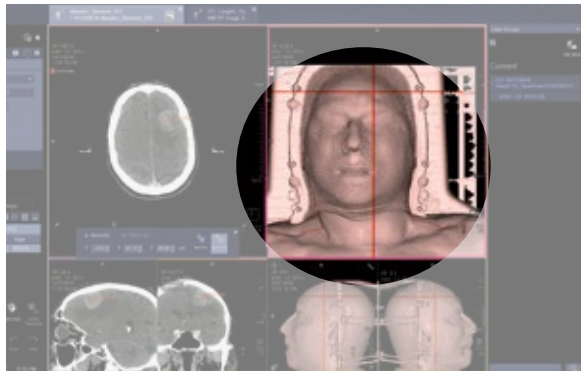
Designed for precision throughout the RT workflow, SOMATOM Confidence® RT Pro reduces unnecessary workflow steps and potential sources of error. Its technology streamlines your operations – for example, by complementing your RT CT with the syngo.via RT Image Suite⁴ 4D contouring with Direct4D or the transfer of coordinates to compatible LAP laser systems with Direct Laser Steering⁴. Similarly, patient positioning and acquisition procedures are made easier and more efficient thanks to touch panels and an all-in-one workplace. At the same time, collaboration, software access, and data interpretation are facilitated with teamplay^{4,15} and the syngo.via server-client architecture.

Don't compromise on quality

An efficient and less error-prone workflow is an important factor in increasing precision in CT images for RT. With SOMATOM Confidence® RT Pro there is no need to compromise between efficiency and patient satisfaction. Built to boost your workflow, SOMATOM Confidence® RT Pro advances efficient quality care – without compromising on individualization.

How it works

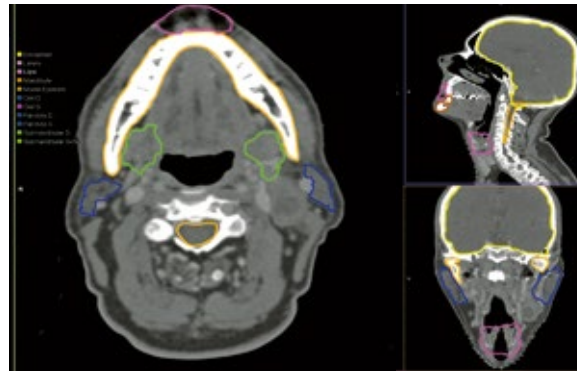
Find out how SOMATOM Confidence® RT Pro reduces potential sources of error and unnecessary steps, and makes processes more efficient – to boost your workflow.



Reduce unnecessary workflow steps with syngo.via RT Image Suite⁴

syngo.via RT Image Suite⁴ is a user-friendly virtual simulation software that makes simulation, image assessment, beam placement, and contouring easier and more integrated. It simplifies and standardizes your daily tasks. For example, Direct Laser Steering⁴ helps you reduce unnecessary workflow steps by transferring coordinates directly to compatible LAP laser systems with no need to access an additional workstation. syngo.via RT Image Suite optimizes your clinical operations by removing manual computation of the middle slice based on autocontouring with automated isocentering for breast.

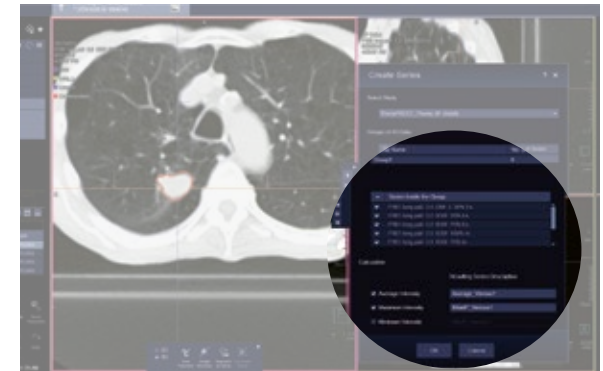
Courtesy of Radiologische Allianz, Hamburg, Germany



Simplified organs-at-risk contouring with AutoContouring triggered at the scanner

The scanner automatically selects the right structure-set template and starts AutoContouring in syngo.via^{4,14} RT Image Suite⁴. Your structure-set template and AutoContouring are therefore usually ready before you arrive, giving you a consistent starting point and making AutoContouring part of the standard acquisition task. AI assisted technology gives you a consistent starting point and making AutoContouring part of the standard acquisition task regardless of the operator.

Courtesy of Hospital Del Mar, Barcelona, Spain



Streamlined 4D workflow with FAST 4D¹¹

syngo.via RT Image Suite⁴ allows you to perform parallel contouring on multiple datasets. It also offers 4D data management with automatic phase splitting, tMinIP, tMIP, and AverageCT generation. FAST 4D¹¹ allows guided 4D workflows and automatically adjusts scan parameters according to breathing rate by selecting one of the three respiratory protocols. It brings speed and efficiency to daily RTP routines. syngo.via RT Image Suite⁴ also offers semiautomatic contour propagation over 4D CT breathing phases⁴ and ITV generation.

Courtesy of MAASTRO clinic, Maastricht, Netherland



The first step toward advanced patient positioning with touch panels

For convenient and efficient patient positioning, SOMATOM Confidence® RT Pro comes with touch panels. Benefit from efficient workflows enabling one click table movement between external RT Laser and internal CT Laser. SOMATOM Confidence® RT Pro offers the flexibility to choose automated table zeroing at the CT laser or at the RT laser with one click. With easy-to-use interface, scan selection, and respiration breathing curve monitoring, the integrated touch panels enable a patient centric workflow. For greater flexibility rear panels are available as an option.



Connect, compare, collaborate with teamplay^{4,15}

teamplay^{4,15} is a cloud-based network to compare and interpret data – and to connect with other healthcare professionals. It is a secure, smart, and simple way to manage protocols, monitor radiation dose from imaging data, optimize your output, and reduce overhead.



TG-66-compliant RT table

Our TG-66-compliant table helps provide accurate patient positioning and reduces the potential for error in your treatment plan. Furthermore, especially designed for radiotherapy use, the multipurpose patient table⁴ accommodates large patients up to 307 kg/676 lbs with a scan range of 165 cm. It is compatible with third-party tabletops or overlays, including Elekta's iBeam evo couchtop, CIVCO's Universal Couchtop (UCT), Qfix Quantum/kVue, and the Qfix Encompass™ SRS immobilization system.



Technical specifications

Key data

Gantry	80 cm
Slices	20 or 64
Scan field	5-50 cm
Reconstructed FoV	5-50 cm 5-80 cm with HD FoV ^{4,8}
Rotation time	0.31, 0.33, 0.5 1s/ 0.75s – 60s (± 10%)
Tube	STRATON MX P High-performance CT X-ray tube
Tube current range	20-666 mA
Tube voltage	70, 80, 100, 120, 140 kV
Max. power	80, 100 ⁴ kW
Max. equivalent power generator (with SAFIRE)	163 kW
Dimensions (gantry, H-W-D)	198 x 238 x 93.5 cm (78 x 93.7 x 36.8 in)
Weight (gantry)	2,300 kg (5,070 lbs)
Max. table load	212 kg / 467 lbs (307 kg / 676 lbs with multipurpose table and high-Capacity tabletop)

Additional products and services

Choose from a variety of additional options and services that give you extra flexibility – tailored to your specific needs.



Smooth integration in your RT department with the all-in-one workplace

In order to make acquisition procedures more efficient, SOMATOM Confidence® RT Pro offers an all-in-one workplace. Perform scanning, simulation, image assessment, and contouring in one place.



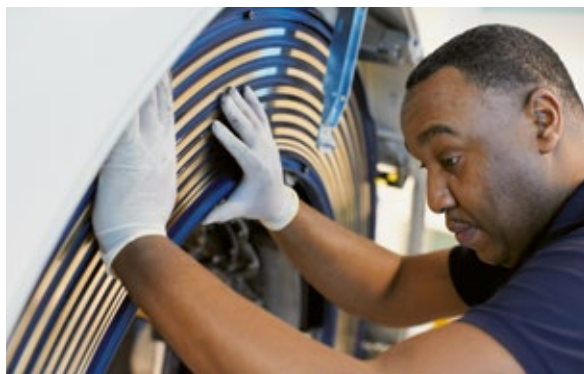
Greater confidence with more protection

Protecting medical equipment is a key issue for us. We have established a culture of cybersecurity awareness to support our work on developing secure equipment and services based on Microsoft Windows 10. Siemens Healthineers IT Security builds on our extensive experience in developing solutions for strengthening and defending your CT system and IT infrastructure.¹⁶



Go one step further in imaging with a sliding-gantry solution

SOMATOM Confidence® RT Pro is also available on rails. The sliding-gantry solution is especially beneficial for brachytherapy. It reduces overall procedure time and offers a rapid workflow by avoiding the need for patient transfer and the risk of applicator movement. In addition, the sliding-gantry solution can be used for proton therapy¹⁵, providing high-quality CT imaging, including 4D, directly in the bunker.



System reliability – through powerful service

Our comprehensive service offering comprises real-time monitoring, preventive maintenance, hardware and software services, as well as application support and training – to enable optimized system availability, performance, and workflow efficiency.



Siemens and Varian partnership: Two leaders at your side. EnVision better cancer care.

The combination of Siemens' imaging excellence and Varian's powerful delivery systems expands the possibilities for image-guided radiotherapy and radiosurgery. Our complementary product portfolio enables RT experts to take advantage of end-to-end workflows and compatible products such as Varian RGSC – also available with SOMATOM Confidence® RT Pro. Together we drive and enable participation in innovations such as HD radiotherapy to EnVision better cancer care.



Why Siemens Healthineers?

At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey towards expanding precision medicine, transforming care delivery, and improving patient experience, all enabled by digitalizing healthcare.

An estimated 5 million patients globally everyday benefit from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics and molecular medicine, as well as digital health and enterprise services.

We are a leading medical technology company with over 170 years of experience and 18,000 patents globally. With more than 48,000 dedicated colleagues in 75 countries, we will continue to innovate and shape the future of healthcare.

¹ Source: IMV Radiation therapy survey 2015/16

² Source: American Cancer Society, www.cancer.org

³ Source: RTAnswers.com, www.rtanswers.org/treatment-information/cancertypes/headneck/index.aspx, accessed May 11, 2015

⁴ Optional

⁵ DirectDensity reconstruction is designed for use in Radiation Therapy Planning (RTP) only. DirectDensity reconstruction is not intended to be used for diagnostic imaging.

⁶ The pacemaker precluded the patient from undergoing an MRI.

⁷ Standard with DirectDensity^{4,5}

⁸ The image quality for the area outside the 50cm standard scan field of view does not meet the image quality of the area inside the 50cm standard scan field of view. Image artefacts may appear, depending on the patient setup and anatomy scanned.

⁹ In clinical practice, the use of SAFIRE and ADMIRE may reduce CT patient dose depending on the clinical task, patient size, anatomical location, and clinical practice.

¹⁰ The following test method was used to determine a 54–60% dose reduction: Noise, CT numbers, homogeneity, low-contrast resolution, and high-contrast resolution were assessed in a Gammex 438 phantom. In this test, low-dose data reconstructed with SAFIRE showed the same image quality as full-dose data. Data on file.

¹¹ Optional, Requires respiratory monitoring device with online mode curve at the CT (Varian RGSC or ANZAI belt)

¹² Requires a gating device that can trigger the CT scanner (such as Anzai/RGSC).

¹³ Christopher F. Njeh, "Tumor delineation: The weakest link in the search for accuracy in radiotherapy." *J Med Phys*, 2008 Oct–Dec; 33(4): 136–140.

¹⁴ *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 in their own right.

¹⁵ Please check if *teampay* is available in your country.

¹⁶ This information contains general descriptions of the technical options available and may not always apply in individual cases.

¹⁷ Requires the "in-room PT usage" option. The CT gantry must be powered off while the particle therapy treatment beam is on.

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The information in this document contains general technical descriptions of specifications and options as well as standard and optional features that do not always have to be present in individual cases.

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The statements by Siemens Healthineers' customers described herein are based on results that were achieved in the customer's unique setting. Because there is no "typical" hospital or laboratory and many variables exist (e.g., hospital size, samples mix, case mix, level of IT and/or automation adoption) there can be no guarantee that other customers will achieve the same results.

Siemens Healthineers Headquarters

Siemens Healthcare GmbH
Henkestr. 127
91052 Erlangen, Germany
Phone: +49 9131 84-0
siemens-healthineers.com