



SIEMENS



Unique Innovations

- X-CARE
- Pediatric CT protocols
- Adaptive ECG-Pulsing including MinDose
- Selective Photon Shield
- Flash Spiral with 458 mm/s scan speed
- CARE kV
- CARE Child
- CARE Configurator
- CARE Contrast III
- CARE Profile
- CARE Dashboard



CT CARE Benefits – SOMATOM Definition Flash

www.siemens.com/somatom-definition-flash

Multiply Your Potential with CARE Generation Flash

Find out how these technical specifications become unique benefits for better patient care.

The SOMATOM Definition Flash, Siemens' latest high-end scanner, was especially designed to make CT exams much healthier for your patients.

Its core innovation – the revolutionary Flash Spiral – can be summarized in four words: Flash speed. Lowest dose.

In the event that upgrades require FDA approval, Siemens cannot predict whether or when the FDA will issue its approval. Therefore, if regulatory clearance is obtained and is applicable to this package, it will be made available according to the terms of this offer.

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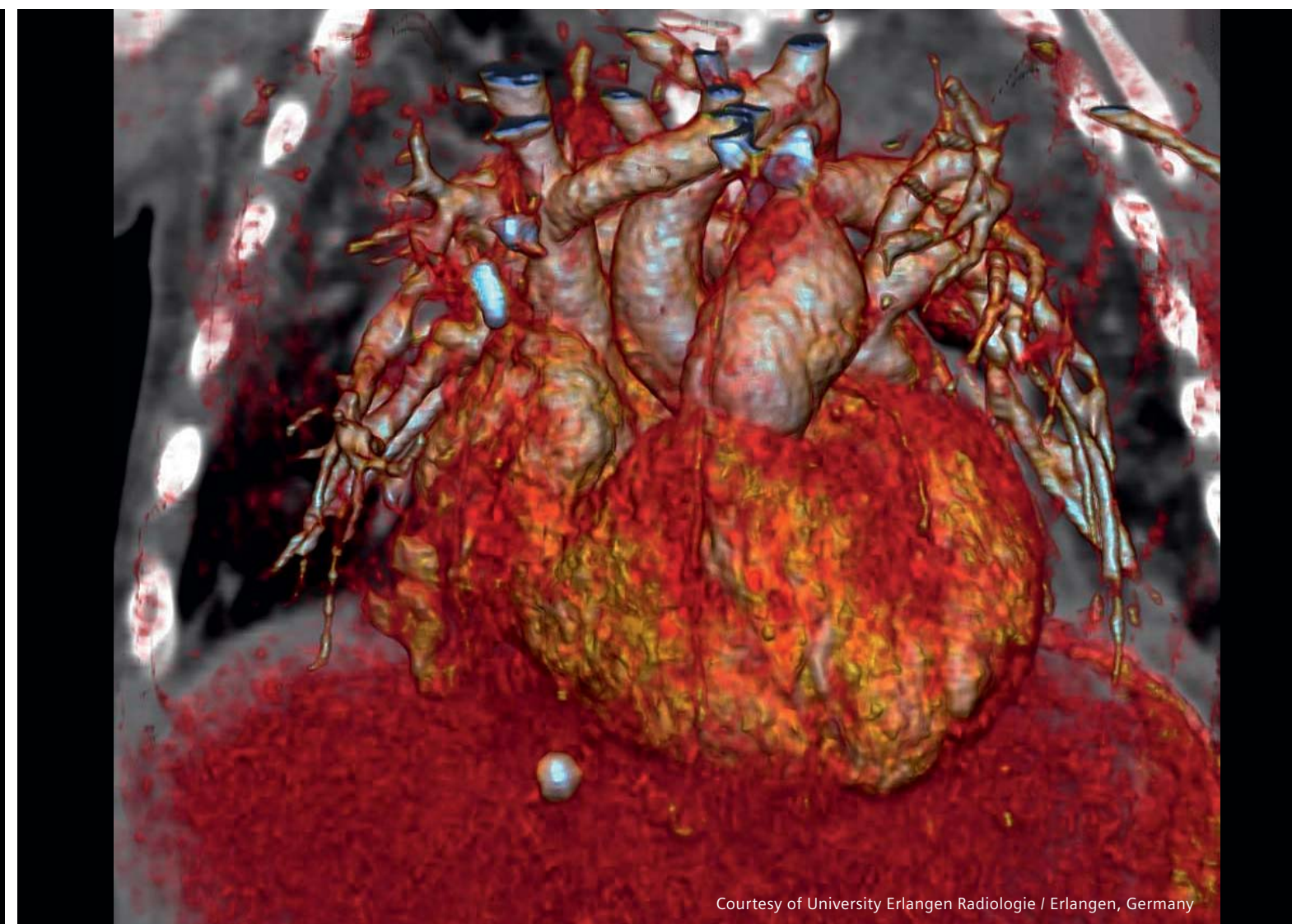
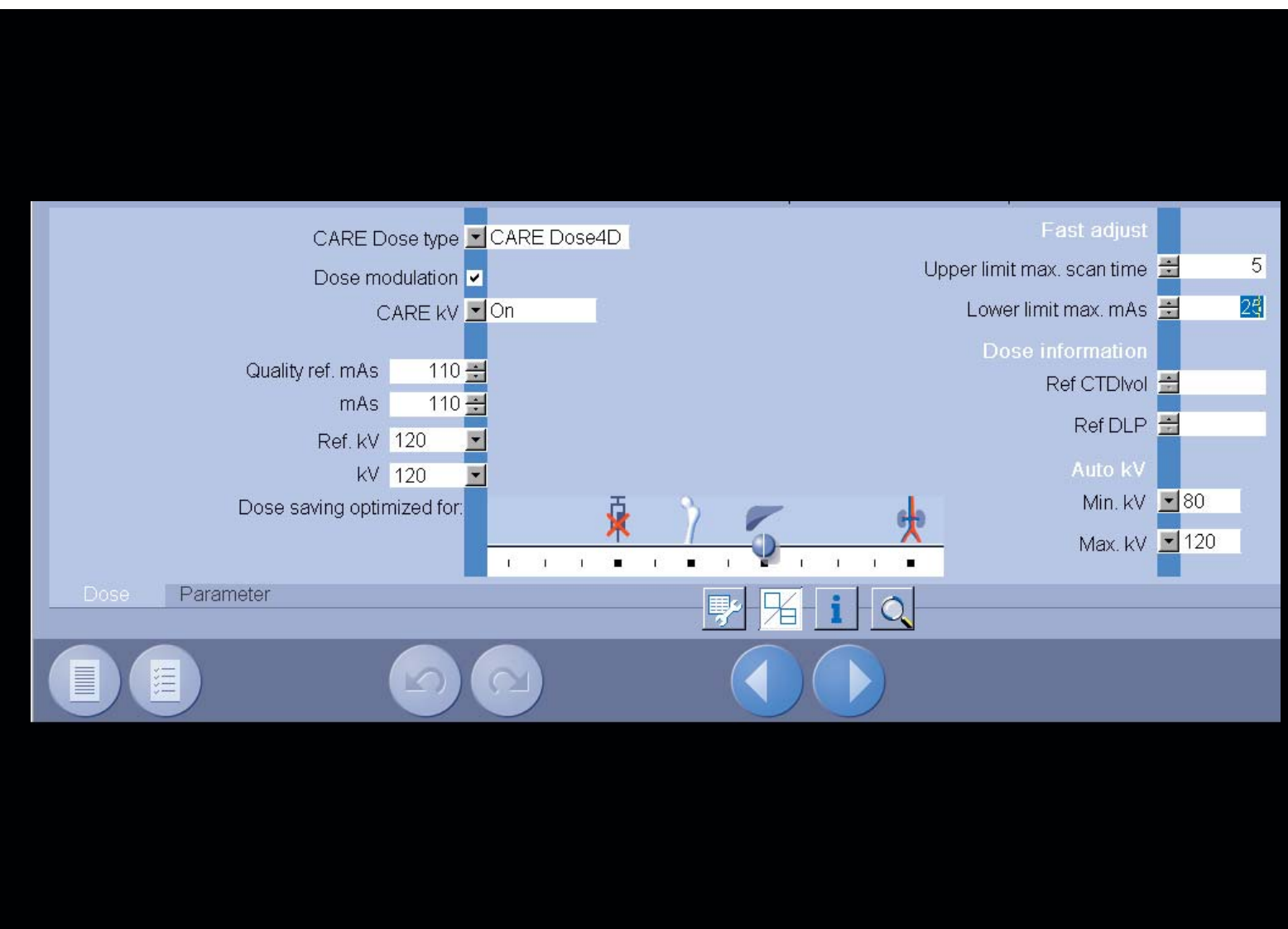
Answers for life.

Automated kV Dose Saving

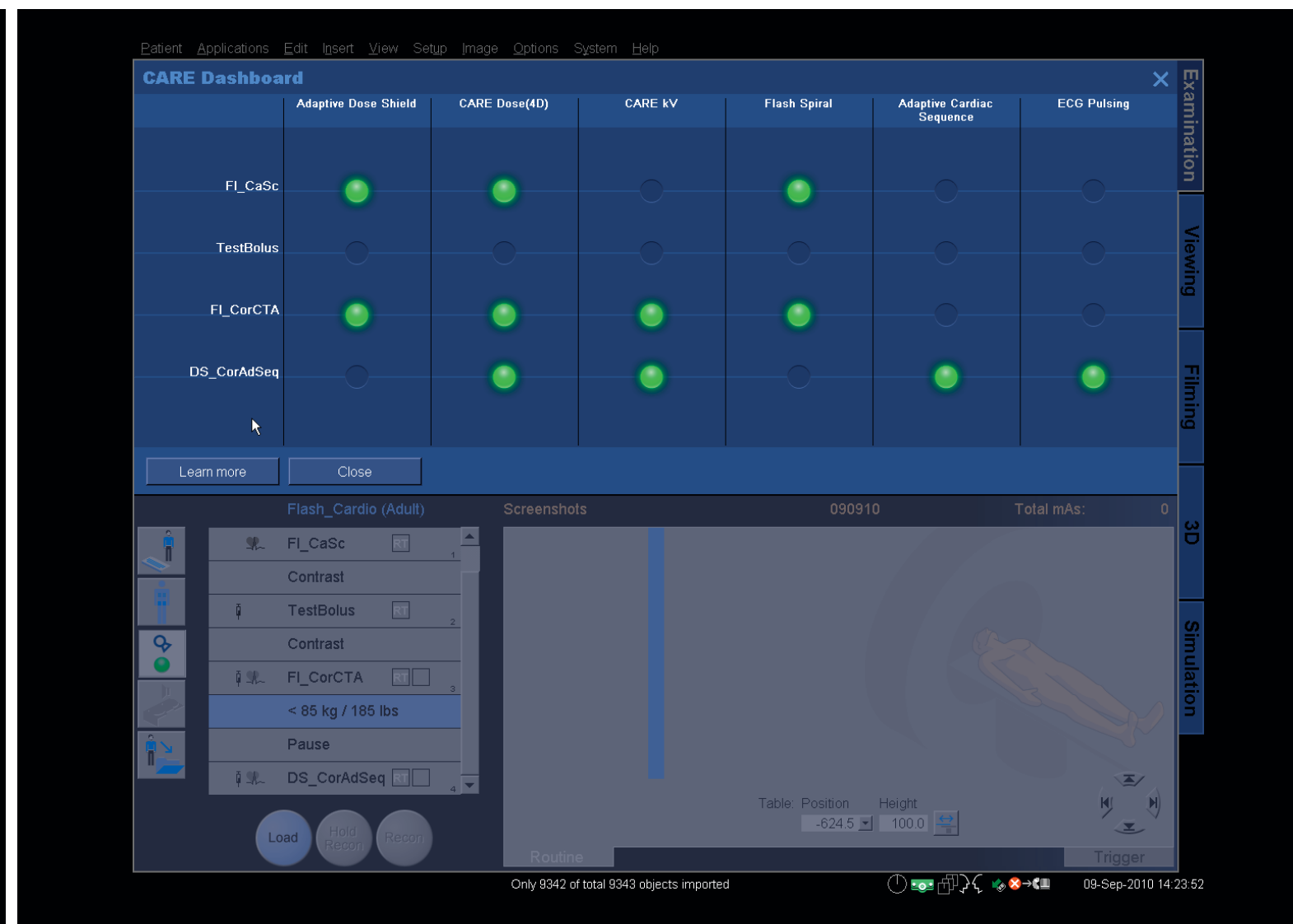
70 kV Pediatric Mode

Low Dose Insurance

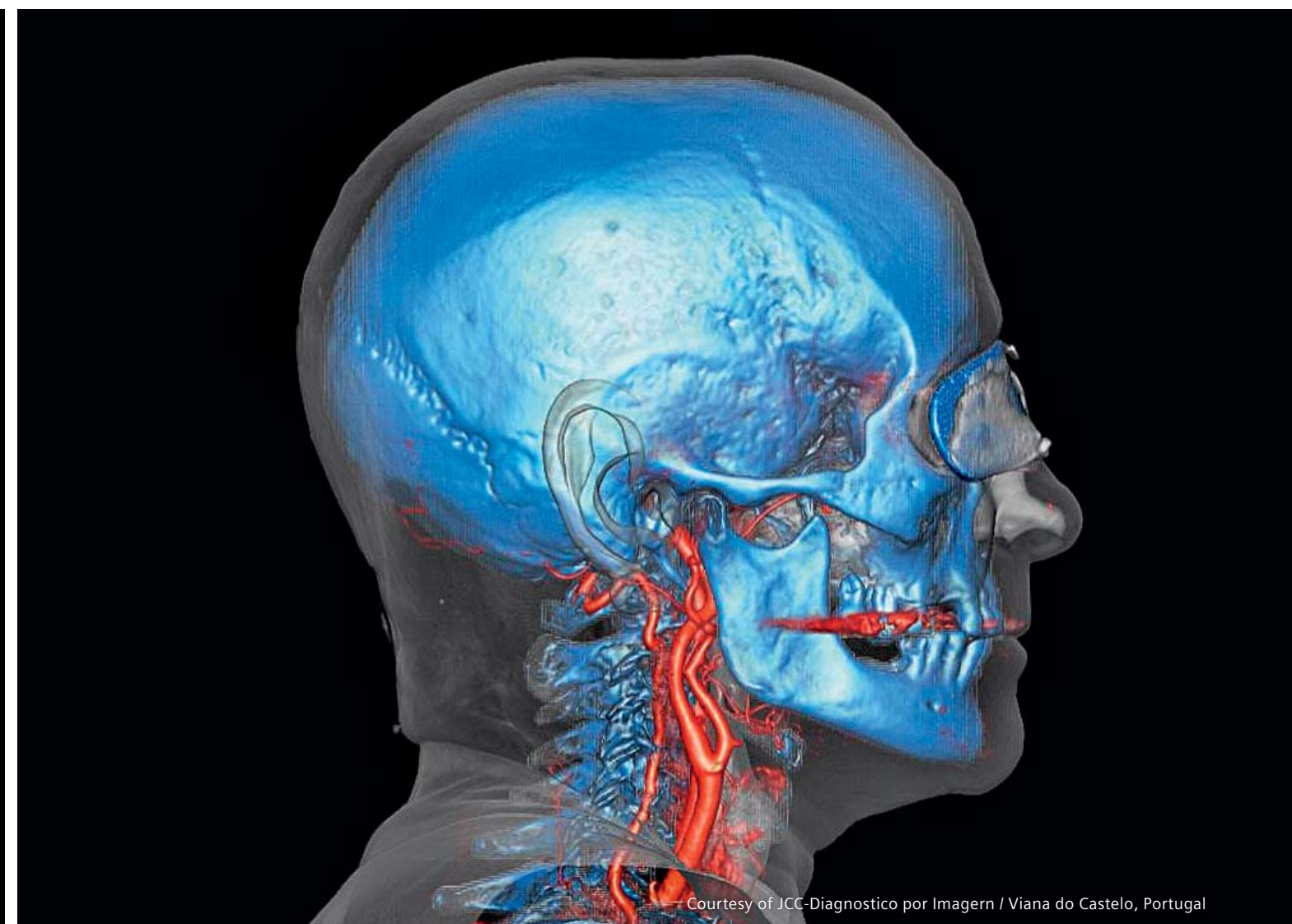
72% of Exams Below Natural Background Radiation



Courtesy of University Erlangen Radiologie / Erlangen, Germany



Only 9342 of total 9343 objects imported 09-Sep-2010 14:23:52



Courtesy of JCC-Diagnostico por Imagern / Viana do Castelo, Portugal

One of the most prominent features of the new CARE platform (Combined Applications to Reduce Exposure) is CARE kV. This consists of an automated, dose-optimized selection of X-ray tube voltage based on a patient's Topogram, and respective of his individual weight distribution.

CARE Dose4D™ performs automatic tube-current modulation in the angular and longitudinal directions, and also adapts to different anatomical regions and patient sizes. Together are a powerful dose-saving technique applicable to all body regions.

CARE kV the slider in the user interface lets you select different examination types, influencing the contrast to noise ratio, for optimal automated scan parameter selection

The new and revised STRATON™ X-ray tube allows for the industry's lowest 70 kV scan mode. Dedicated pediatric CT imaging protocols together with the 70 kV mode significantly lower radiation exposure in your youngest and most dose-sensitive patients.

collimation: 32 x 1.2 mm
 spatial resolution: 0.33 mm
 scan time: 1.21 s
 scan length: 129 mm
 rotation time: 0.5 s
 70 kV, 130 effective mAs
 DLP: 52mGy
 eff. Dose: 1.35 mSv

The CARE Dose Configurator introduces new CARE Dose4D reference curves for each body region and each body habitus, allowing the parameters to be set more precisely to the patient's anatomy. Additionally, the CARE Profile provides visualization of the dose distribution along the Topogram prior to the scan. CARE Dashboard gives you a quick and easy-to-understand overview of activated dose reduction features and technologies for each scan range of an examination in order to analyze and manage the dose to be applied in the scan. All to make sure you apply all the possible technologies to achieve the lowest possible dose at optimum image quality in every patient.

CARE Dashboard gives you an quick and easy-to-understand overview of all the possible dose reduction technologies and their status

SAFIRE*, our Sinogram Affirmed Iterative Reconstruction, is the first raw-data-based iterative reconstruction with superior image quality improvement or significant dose reduction**, e.g. in pediatric imaging. CARE Dose4D, our automatic exposure control through real-time and online tube current modulation – in plane and scan direction – gives you additional dose savings. It works hand in hand with the new CARE kV automatic tube voltage adoption. X-CARE allows reduction of direct X-ray exposure to dose-sensitive body regions, e.g., the breasts, thyroid gland or eye lens. It reduces sensitive-area exposure up to 40% (e.g., in the female breast) without loss of image quality through partial scanning, and is fully compliant with Dual Energy scanning. All these unique innovations allow 72% of scan protocols to be performed at a dose below the level of natural annual background radiation.

**In clinical practice, the use of SAFIRE may reduce CT patient dose depending on the clinical task, patient size, anatomical location, and clinical practice. A consultation with a radiologist and a physicist should be made to determine the appropriate dose to obtain diagnostic image quality for the particular clinical task.

Dual Energy Examination
 collimation: 64 x 0.6 mm
 spatial resolution: 0.33 mm
 scan time: 5 s
 scan length: 342 mm
 rotation time: 0.28 s
 100/5n140 kV, 140/140 effective mAs
 eff. dose: 1.12 mSv

*The information about this product is being provided for planning purposes. The product is pending 510(k) review, and is not yet commercially available in the U.S.