

SIEMENS



Courtesy: Inselspital Bern / Bern, Switzerland

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CARE Right

Committed to the Right Dose in CT

Answers for life.

CT Head

Scanning with the Right Dose

CARE Right aims at finding the right dose for every individual patient. What matters is the right balance between image quality and radiation dose, by scanning with the right dose technology at the right dose levels supported by the right dose management. Like in the following case:

Diagnosis:

With the Stellar Detector – the first fully-integrated detector – electronic noise can be minimized allows a much better differentiation of grey and white matter in this case. No abnormalities are detected.

Scan method:

Spiral acquisition with SOMATOM Definition Edge

Collimation: 128 x 0.6 mm

Spatial resolution: 0.30 mm

Scan time: 7 s

Scan length: 159 mm

Rotation time: 1.0 s

100 kV, 300 mAs

Right Dose Technology:

The unique low signal capabilities of the Stellar Detector are the ideal counterpart for SAFIRE, resulting in even higher sharpness and clarity despite the reduced dose.

Right Dose Levels:

DLP: 451 mGycm

CTDI_{vol}: 26.04 mGy

Eff. dose: 0.947 mSv

Reference value in Switzerland: CTDI_{vol}: 65 mGy²

Right Dose Management:

Learn more about image quality by watching the clinical webinar presented by Walter Huda PhD, Medical University of South Carolina, Charleston, USA.

Find out more about CARE Right on www.siemens.com/care-right

¹ 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. The following test method was used to determine a 54 to 60% dose reduction when using the SAFIRE reconstruction software. Noise, CT numbers, homogeneity, low-contrast resolution and high contrast resolution were assessed in a Gammex 438 phantom. Low dose data reconstructed with SAFIRE showed the same image quality compared to full dose data based on this test. Data on file.

² Bundesamt für Gesundheit (Merkblatt R-06-06, Diagnostische Referenzwerte in der Computertomographie, 01.04.2010)