One exam. One workflow. Immeasurable versatility.

SIEMENS
medical

The first system to integrate state-of-the-art SPECT with diagnostic multislice-CT, Symbia combines superb image clarity with unprecedented flexibility. Now you'll have diagnostic capabilities for a range of indications at a single point of care. All in a compact,

Symbia®. There's only one like it.

patient-friendly unit that fits any setting. Built on a single, integrated platform, Symbia's TruePoint™ SPECT·CT technology captures both functional and anatomical information for precise lesion localization. With one exam. One bed. And one workstation. It's all the precision you need. All in one.

It enables a new level of care. Without a doubt.

TruePoint SPECT·CT

Symbia's TruePoint SPECT·CT technology makes it possible to pinpoint the exact location, size, nature, and extent of disease, anywhere in the body. Now physicians can diagnose earlier and more accurately. Plan treatment even more effectively. Monitor treatment for better follow up. Even avoid unnecessary surgery.

True clarity. Only TruePoint SPECT·CT combines the functional sensitivity of SPECT with the rich anatomical detail of diagnostic multislice-CT, offering superb image quality.

True confidence. TruePoint SPECT·CT provides the first co-registered SPECT and diagnostic CT images — quickly, accurately, and without patient repositioning — for a level of certainty that wasn't possible until now.

True efficiency. Performing two scans in a single, automated procedure enables unrivaled workflow efficiency.

True integration. With TruePoint SPECT·CT, you're able to perform three different studies — SPECT, diagnostic multislice-CT, and SPECT·CT — on one compact system.

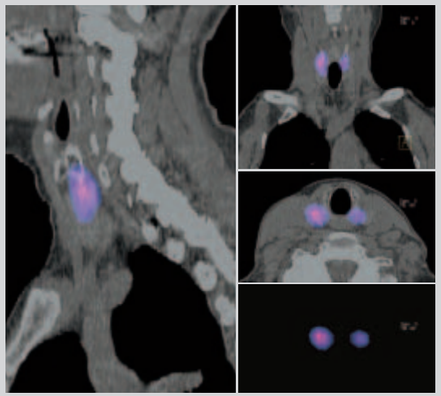
Versatile configurations accommodate any study.

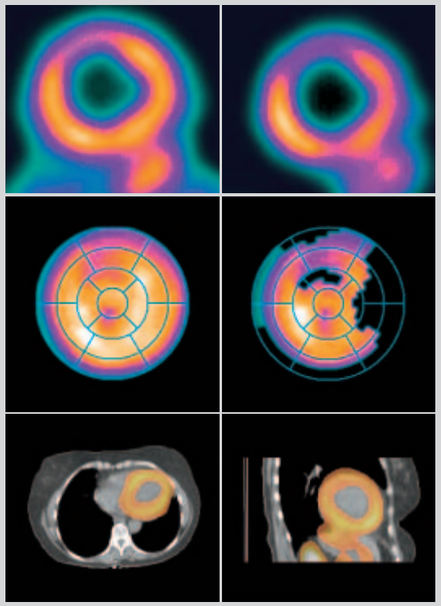
During a CT scan, SPECT detectors move beneath the bed, providing patients with more room and an unobstructed view.

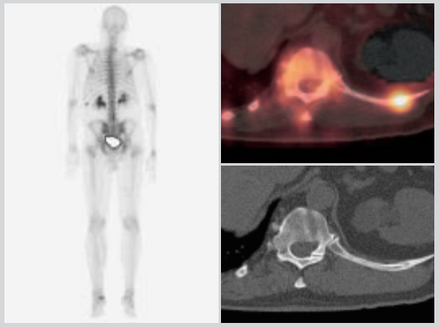
Reconfiguration to 90° or 76° for cardiac SPECT is fully automatic and takes less than 30 seconds.

Detectors in 180° position for general SPECT, static and dynamic views, and whole-body studies.

Every image is enhanced with exceptional detail.







Offering extraordinary possibilities everywhere.

A merger of true equals, Symbia's integrated SPECT and diagnostic multislice-CT bring a whole new dimension to nuclear medicine. With the ability to provide precise localization of tumors and other pathologies before disease reveals itself, Symbia has the potential to revolutionize treatment planning for cancer, heart disease, and neurological disorders.

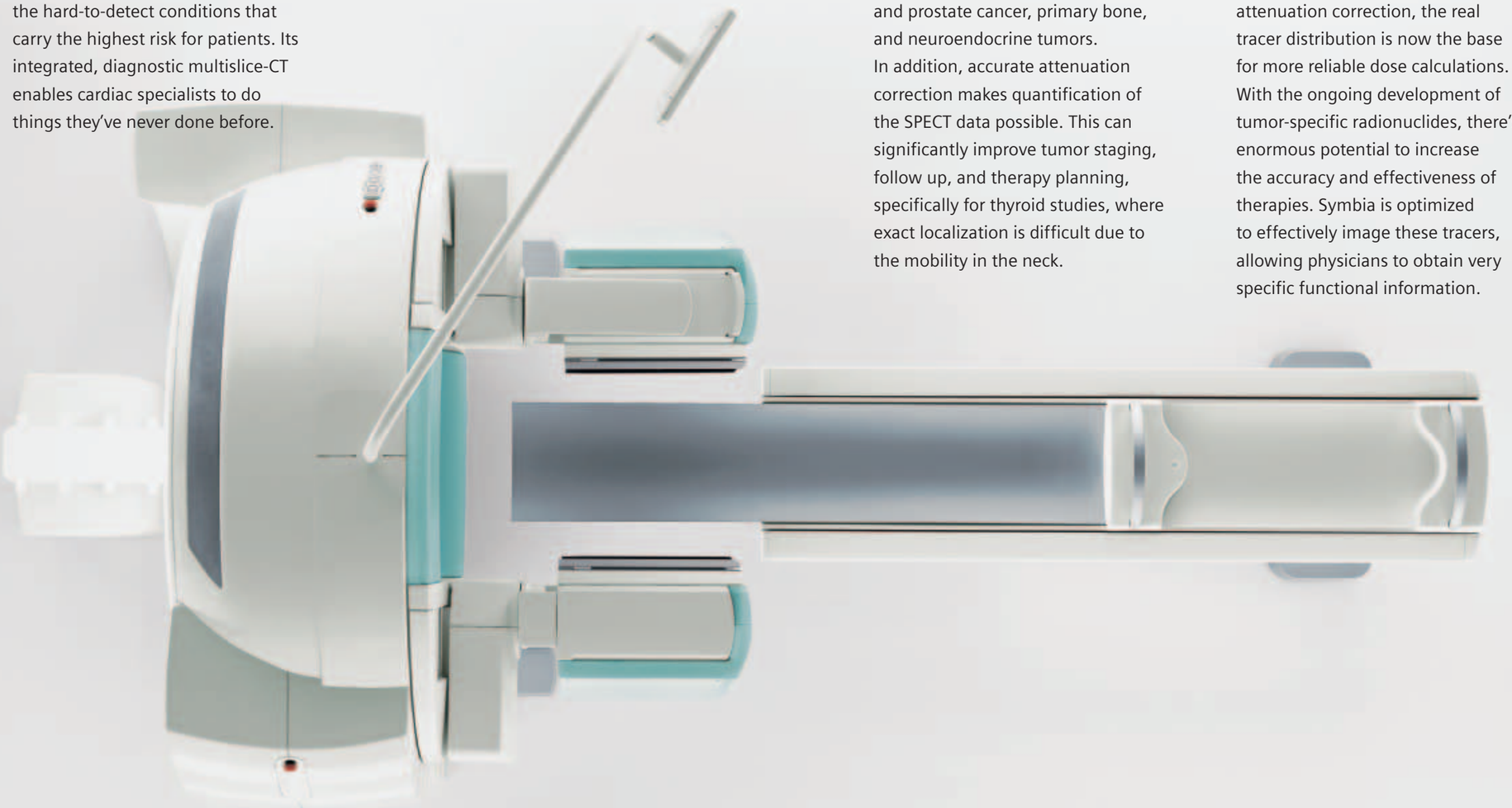
A new perspective in cardiology.
Symbia has enormous potential for cardiac imaging, revealing even the hard-to-detect conditions that carry the highest risk for patients. Its integrated, diagnostic multislice-CT enables cardiac specialists to do things they've never done before.

Like acquire an accurate attenuation map in less than 30 seconds. Quantify coronary artery calcium. Evaluate the patency of coronary arteries. And assess myocardial perfusion and viability. All in a single clinical setting.

Oncology: Precise lesion detection.
Precise localization of neoplastic lesions enables physicians to accurately assess the presence, the extent, and the tissue characterization of multiple malignancies such as breast and prostate cancer, primary bone, and neuroendocrine tumors. In addition, accurate attenuation correction makes quantification of the SPECT data possible. This can significantly improve tumor staging, follow up, and therapy planning, specifically for thyroid studies, where exact localization is difficult due to the mobility in the neck.

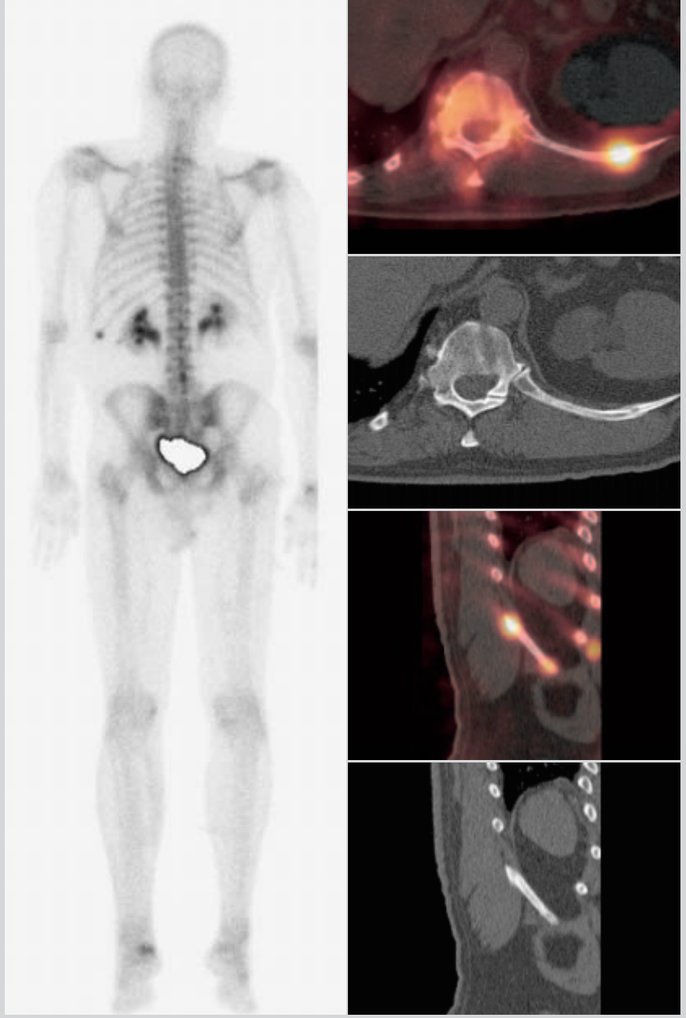
New thinking in neurology.
The combination of function and anatomy offers new perspectives for acute stroke and bleeding diagnosis, and patient management. For dementia, movement disorders, and epilepsy, Symbia offers more information than a standalone SPECT or CT scan.

Radionuclide therapy. Unlimited potential.
Until now, physicians could only estimate the correct radiation doses for therapy planning. Using attenuation correction, the real tracer distribution is now the base for more reliable dose calculations. With the ongoing development of tumor-specific radionuclides, there's enormous potential to increase the accuracy and effectiveness of therapies. Symbia is optimized to effectively image these tracers, allowing physicians to obtain very specific functional information.

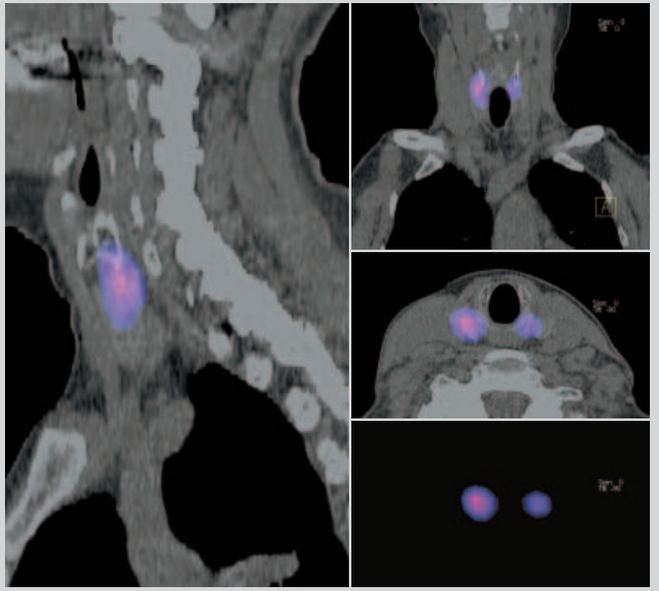


See what you've never seen before.

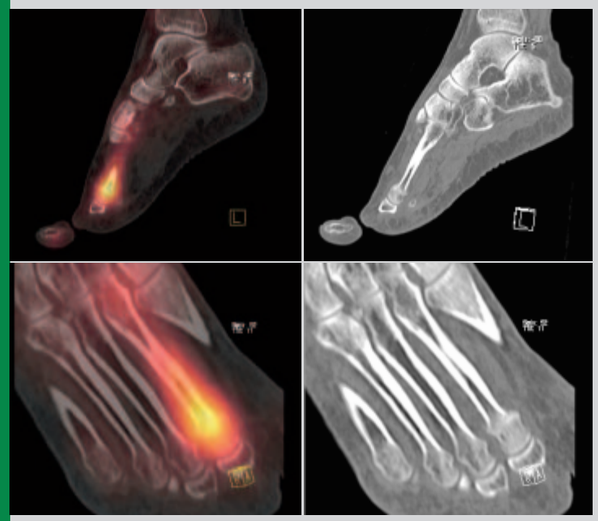
Until now, precise tumor localization with specific SPECT tracers was often very difficult because of the absence of anatomical information. Symbia's capability to intrinsically fuse and register SPECT images with the anatomical images of diagnostic multislice-CT scans eliminates inaccuracies, showing if, and exactly where, a lesion exists. What's more, the combination of SPECT and CT increases diagnostic specificity, for example, in bone scans and myocardial perfusion.



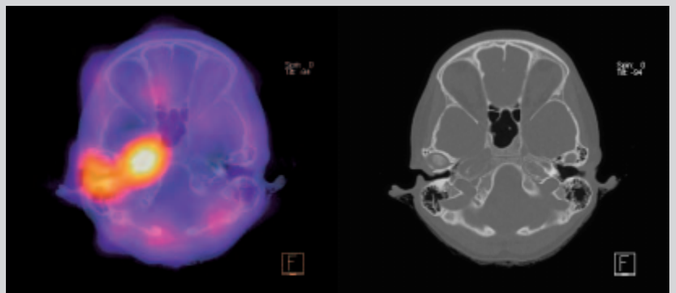
Patient with history of bladder cancer and inconclusive trauma anamnesis. 99mTc-DPD whole-body scan revealed two lesions in the left hemi thorax. The corresponding SPECT scan clearly demonstrated that one of the lesions was localized to the 12th rib and that it was not kidney activity as considered with planar imaging alone. The precision of SPECT·CT revealed both lesions as rib fractures. Metastatic bone disease could, therefore, be ruled out in one exam.



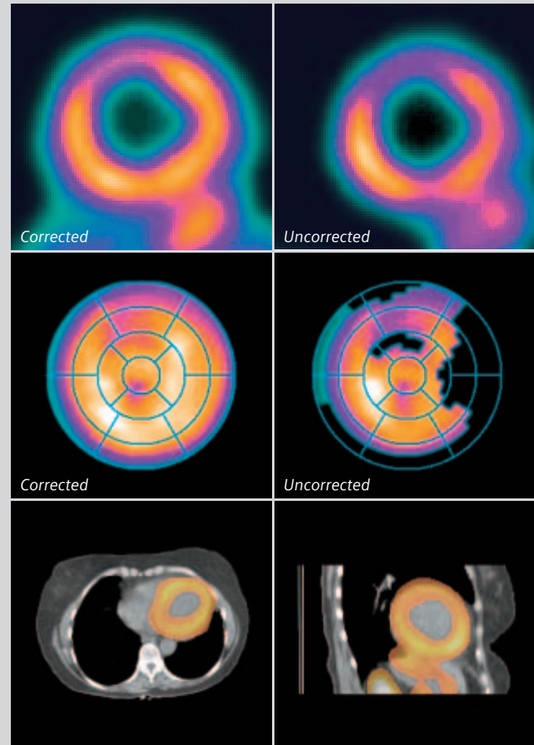
Localization of suspected parathyroid adenoma for this patient with increasing Ca++ and PTH levels. Focal increase of tracer uptake at the upper pole of the right parathyroid gland, corresponding to a parathyroid adenoma was diagnosed from the 99mTc-MIBI SPECT·CT scan



Planar X-ray did not show any abnormality to this two week old foot trauma. 3 Phase 99mTc-DPD SPECT scan showed an increase of perfusion and blood pool in the right metatarsus. Delayed SPECT images revealed focal increase of tracer uptake in the distal metatarsal bone D2 right. After correlation with diagnostic CT, a distal metatarsal fracture was diagnosed.



Neuroblastoma IV with complete remission, follow-up 123I-MIBG-SPECT·CT evaluation of patient six months post therapy. Faint intracranial MIBG uptake noted in the SPECT image. Correlation with CT reveals recurrent tumor in the right petrous bone with signs of osteolysis.



Assessment of congestive heart failure patient prior to revascularization. SPECT without attenuation correction shows severe reduction of perfusion anterior in the territory typical of the mid and distal LAD. After CT based attenuation correction, significant reduction of the defect severity and extent, as well as almost normal tracer distribution in the lateral wall.

Unique features designed to relax any patient.

Symbia is designed to enhance the patient experience every step of the way, offering increased comfort, convenience, and ease-of-use.

e.media
The e.media patient comfort system provides interactive multimedia capability. Its integrated 15″ touch screen and DVD player increase relaxation, reducing patient anxiety and motion during the scan.

Innovative bed design
Symbia's patient bed is designed for patient comfort, image quality, and ease of use. It provides whole-body arm support, as well as comfortable cardiac armrests and head holder. The bed raises and lowers for easy patient access. There's no need to move the bed to change collimators.

Breath-hold time indicator
Patients are comforted by a display in the gantry that clearly indicates remaining breath-hold time, helping to make the exam easier to get through while reducing movement.

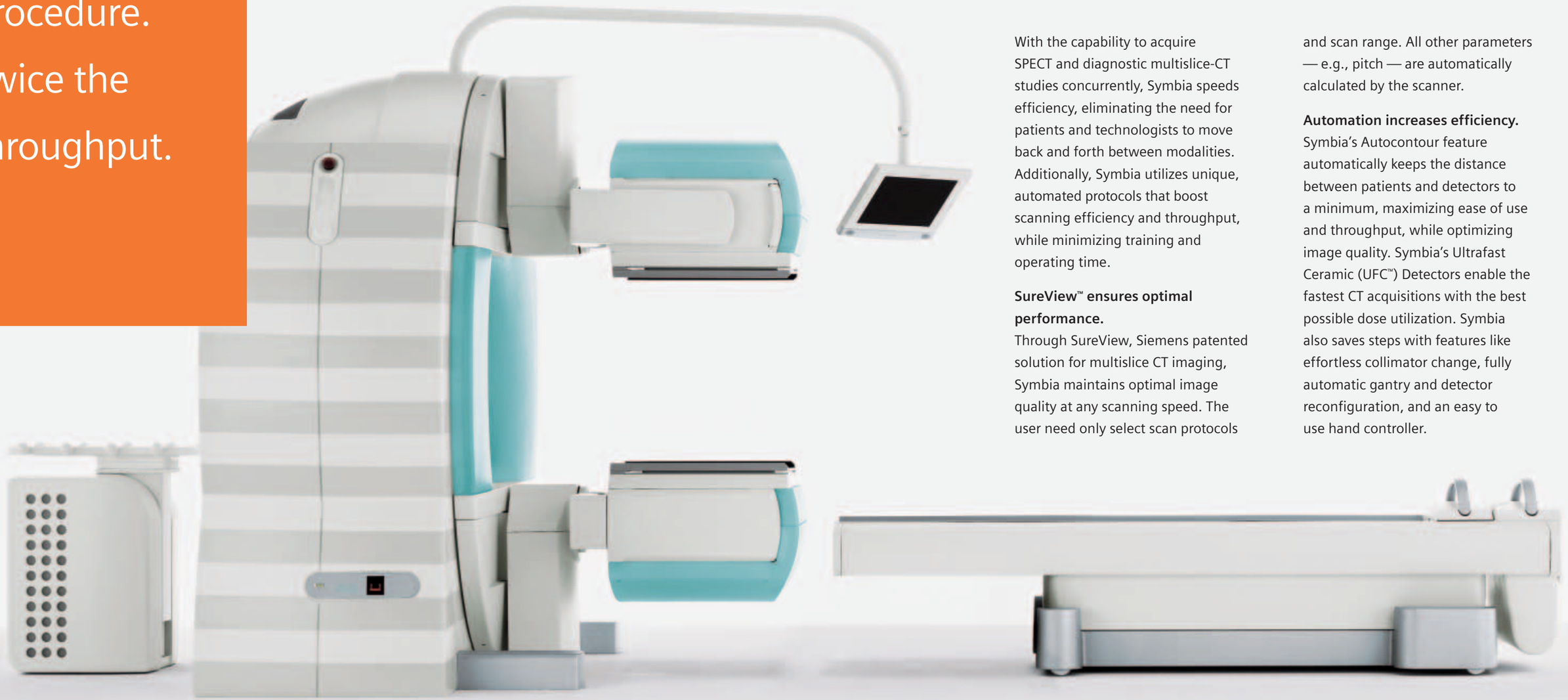
A better patient experience from any angle.

Symbia's sleek, open gantry design calms patients, while setting new standards for comfort. Patient positioning and acquisition setup is faster and more comfortable for both patient and operator.

Shorter exams. Less waiting.
By providing both diagnostic CT and SPECT studies in a single visit, Symbia makes exams easier on patients, preventing days or weeks of uncertainty as they wait for test results. Symbia's TruePoint SPECT·CT technology also reduces exam time. For example, less than 30 seconds is added to any SPECT study for accurate attenuation correction and to obtain diagnostic quality anatomical maps.

Reduce exposure concerns.
Symbia utilizes a range of CARE (Combined Applications to Reduce Exposure) radiation reduction solutions to keep exposure of patients, physicians, and technologists to a minimum.

One procedure. Twice the throughput.



With the capability to acquire SPECT and diagnostic multislice-CT studies concurrently, Symbia speeds efficiency, eliminating the need for patients and technologists to move back and forth between modalities. Additionally, Symbia utilizes unique, automated protocols that boost scanning efficiency and throughput, while minimizing training and operating time.

SureView™ ensures optimal performance.
Through SureView, Siemens patented solution for multislice CT imaging, Symbia maintains optimal image quality at any scanning speed. The user need only select scan protocols and scan range. All other parameters — e.g., pitch — are automatically calculated by the scanner.

Automation increases efficiency.
Symbia's Autocontour feature automatically keeps the distance between patients and detectors to a minimum, maximizing ease of use and throughput, while optimizing image quality. Symbia's Ultrafast Ceramic (UFC™) Detectors enable the fastest CT acquisitions with the best possible dose utilization. Symbia also saves steps with features like effortless collimator change, fully automatic gantry and detector reconfiguration, and an easy to use hand controller.

Acquire. Process. Share.
All from a single workplace.

The integration of *syngo*®, Siemens unique software platform, with Symbia enables easy communication of imaging data across modalities. Designed to integrate medical imaging seamlessly into the complete clinical workflow, from registration to billing, *syngo* software also enables SPECT and CT datasets to be acquired and processed on a single workstation. A state-of-the-art workplace that offers uniquely efficient post processing to meet your department's clinical demands, e.soft™@LEONARDO® is at the heart of your clinical workflow.

We see a way to acquire accurate attenuation data in less than 30 seconds

We see a way to increase diagnostic quality for 100% of SPECT·CT procedures

Not just next generation. True transformation.

We see a way to eliminate registration inaccuracies

We see a way to double patient throughput in a single, integrated SPECT·CT imager

Symbia's flexible, scalable system architecture allows Siemens to offer a variety of models within the Symbia family, ranging from systems with attenuation correction to multislice-CT capabilities. Symbia offers various multislice-CT configurations with speeds of up to 0.6 seconds per rotation, allowing acquisition of a high quality CT scan in a few seconds.

Symbia T

Optimized attenuation correction for cardiology and oncology applications. Diagnostic quality CT data can be registered and fused with SPECT study for anatomical mapping.

- state-of-the-art SPECT
- diagnostic CT
- 3 or 5 mm slice thickness
- attenuation correction in less than 30 seconds

Symbia T2

Dual-slice CT optimizes attenuation correction and enables precise localization of areas with abnormal SPECT uptake. CT also available as a fully diagnostic unit for routine oncology and radiology applications.

- state-of-the-art SPECT
- diagnostic 2-slice CT
- 1 to 10 mm slice thickness
- 0.8 seconds rotation

Symbia T6

In addition to all Symbia T2 capabilities, 6-slice CT can be used as a fully functional standalone CT with advanced applications such as calcium scoring, angiography, colonography and neurology.

- state-of-the-art SPECT
- diagnostic 6-slice CT
- 0.63 to 10 mm slice thickness
- 0.6 seconds rotation

Proven Outcomes. This is what Siemens is helping to deliver right now. Outcomes that result from truly efficient workflow. Outcomes that improve your bottom line. Outcomes that lead to a level of care that feels exceptional to the patient and the care provider. Proof positive of the value of integrating medical technology, IT, management consulting, and services. In a way that only Siemens can.

Welcome to a new era in nuclear medicine. Symbia offers the chance to re-examine how the diagnostic process works — not only the order in which studies are performed, but the way the whole care pathway is constructed. Its greater accuracy will more efficiently reveal distribution and localization of radiopharmaceuticals currently in development. Expanding the potential of these new agents to highlight specific gene expression, detect additional conditions, and establish dosimetry for radiation treatment planning, based on attenuation corrected images.

With an upgradeable platform that enables you to select a uniquely configured system that fits your needs and budget, Symbia is built to accommodate your facility's future, as well. Symbia is available in three models:

Symbia T

Symbia T2

Symbia T6

Conformance to Standards

The Symbia family conforms to the Medical Device Directive Quality System and the Essential Requirements of the Medical Device Directive. The product is designed and tested for safety in accordance with IEC 601-1 and for ElectroMagnetic Compatibility (EMC) in accordance with the European Union's EMC Directive, 89/336/EEC. Labeling for these requirements as well as ISO 9001 and Class II Laser Product appears at appropriate locations on the product and in its literature. The software is DICOM compliant. The scanner is CSA compliant.

ISO 9001 certified, meeting internationally recognized quality standards for good manufacturing practices.

Siemens reserves the right to modify the design and specifications contained herein without prior notice. As is generally true for technical specifications, the data contained herein varies within defined tolerances. Product performance depends on the choice of system configuration. Some configurations are optional. Please contact your local Siemens Sales Representative for the most current information or contact one of the addresses listed below.

Siemens **Medical Solutions** that help

Siemens AG, Medical Solutions
Henkestr. 127, D-91052 Erlangen
Germany
Telephone: +49 9131 84-0
www.siemens.com/medical

Siemens Medical Solutions USA, Inc.
Nuclear Medicine Group
2501 N. Barrington Road
Hoffman Estates, IL 60195
Telephone: (847) 304-7700

© 2004, Siemens AG
Order No. A91004-M2330-M77-1-7600
Printed in Germany
GP NM WS 11043.