Introducing Biograph mCT.

The world’s first molecular CT.

www.siemens.com/mi
magnificent-clinical-images CT.

more-information-in-one-scan CT.

multitasking CT.

I want my mCT.

maximum-return-on-investment CT.

minimum-dosage CT.

more-patient-comfort CT.

meets-every-need CT.

made-for-the-future CT.

It’s the new frontier in integrated imaging.

Welcome to the world of mCT.
must-have CT.

You’re going to want your own mCT if:

You can’t tell, by looking at your CT images, whether the tiny abdominal lesions are benign or hypermetabolic.

You have problems scanning claustrophobic or bariatric patients because the bore of your CT scanner is too small and its bed can’t handle extreme weight.

You imagine the benefits of getting more diagnostic information from two powerful modalities, in one compact system, in one room, with one team of operators.

The future of imaging is here. Biograph mCT — the world’s first molecular CT. Through a perfect integration of the most advanced HD·PET platform and the world’s first Adaptive Spiral CT, Siemens has created a next generation dual modality device for a new level of integrated imaging. It offers whole-body PET·CT scanning in 5 minutes and the flexibility of day-in, day-out CT scanning. The result is exceptional diagnostic performance in imaging. Unequalled efficiency to work in a true shared-services capacity. And unequalled patient care and comfort through a unique design that combines a short tunnel, a large bore, and a very compact footprint.

Biograph mCT. It’s what your next CT should be.
With its wide coverage and fast rotation speed, the Biograph mCT provides an excellent display of the entire thorax, including small peripheral lung lesions.
Unequalled CT capabilities in an integrated system.

Biograph mCT brings a new dimension to CT imaging: molecular. It gives you the option of using a high resolution CT in conjunction with high definition PET imaging or as a standalone CT. You choose. Depending on the case, you can turn on molecular contrast for additional metabolic information or leave it off for routine CT scans.

As a dedicated CT, Biograph mCT offers the very best. Its high isotropic resolution, combined with its ultra-fast rotation time, brings out the finest anatomical details in every scan — routine and advanced — virtually eliminating motion artifacts.

Available in detector configurations of up to 128 slices, it offers the possibility of entire-body CT scans in just 10 seconds. Its powerful CT generator, with 100 kW power reserves, lets you scan challenging bariatric patients, without increasing dosage. In fact, Biograph mCT’s unique Adaptive Dose Shield works to optimize dosage for every individual case, eliminating clinically irrelevant radiation.

With Biograph mCT, you get scanning technology that’s fully adaptable. It adapts to virtually all patients; it adapts to meet various clinical needs; it adapts for maximum dose protection; and it adapts to your space.

No other CT can quite match Biograph mCT’s unique diagnostic abilities and versatility. It’s a premium CT that provides molecular contrast and the only CT that can do routine whole-body PET-CT scans in 5 minutes. Use it for all your CT needs and for PET when you need it.
A heart, scanned with the step-and-shoot mode of the Biograph mCT, Adaptive Cardio Sequence. Only 1.5 mSv dose was needed to image down to the last detail.

Adaptive 4D Spiral on the Biograph mCT enables whole organ perfusion studies, such as a complete stroke assessment of the entire brain.

With Biograph mCT, bariatric image quality is excellent as in this case of Non-Hodgkin lymphoma demonstrating enlarged retroperitoneal lymph nodes and a lump in the right groin (left).
Biograph mCT offers sharp delineation of the smallest structures (i.e. Incus) with the industry’s highest isotropic resolution of 0.24 mm.

With excellent power reserves and resolution, Biograph mCT provides the finest visualization of the smallest abdominal vessels in an obese patient with a BMI over 50.
Biograph mCT offers excellent resolution and contrast in PET-CT imaging, such as in this primary squamous cell carcinoma in the left lung with hilar lymph node metastases.
Unequalled molecular clarity with ultraHD-PET for 5-minute whole-body PET-CT scans.

We developed Biograph mCT to work as a true dual-modality scanner. So you can enhance your high-resolution CT images, when required, with molecular contrast for even greater diagnostic certainty.

Biograph mCT offers you PET capabilities second to none. Built upon proven Siemens technologies such as LSO, TrueV, and HD-PET, it lets you do routine whole-body PET-CT scans in only 5 minutes. And its ultraHD-PET technology easily outperforms conventional PET-CT scanners, delivering highly detailed images with up to 4 times as much contrast.

It offers 2 mm uniform resolution throughout the field of view (FOV). And with the TrueV extended field of view package, you can double Biograph mCT’s PET count rate to reduce acquisition time or injected dose by 50%.

Biograph mCT brings the molecular contrast of PET to outstanding CT images, providing critical diagnostic information.

Biograph mCT provides a comprehensive solution for radiation therapy planning. It gives you integrated PET and CT gating, excellent tumor delineation, a large 78 cm bore for RTP devices, and full DICOM RT connectivity with all major RTP vendors.

Biograph mCT puts more control in your hands and more information in front of your trained eyes.

It equips you to make the most confident and informed diagnoses. Biograph mCT’s razor-sharp, distortion-free PET capabilities and outstanding CT resolution combine to give you the best images in both modes — PET and CT.
Biograph mCT in an ideal platform for imaging bariatric patients, such as in this lung carcinoma with mediastinal spread and upper lobar collapse.

With the industry-leading NEMA count-rate, Biograph mCT enables outstanding PET perfusion studies, as in this inferolateral myocardial infarction with total occlusion at mid RCA.

The Biograph mCT offers exceptional visualization of lung tumors with high contrast and resolution, such as this upper lobe tumor with bronchial invasion.
Unequaled design for greater patient care and comfort.

Conventional PET-CT systems — with narrow bores and long tunnels — aren’t ideally designed for patient comfort, causing claustrophobia in many patients. Siemens recognized these issues and addressed these challenges by pioneering the development of a large-bore PET-CT scanner.

Biograph mCT is designed to accommodate all kinds of patients — including pediatric and bariatric. Comfortably and easily. Its oversized 78 cm bore and short tunnel create a large, open scanning zone, helping to alleviate the sense of claustrophobia. The large bore allows better positioning of RTP devices such as breast boards and makes scanning of bariatric patients easier. In addition, Biograph mCT’s sturdy, extra-wide 228 kg (500 lb) capacity bed provides comfortable support for both obese and standard patients during scans. The unique bed virtually eliminates CT and PET registration artifacts — often a concern in bariatric imaging.

Taking comfort a step further, Biograph mCT addresses two of the foremost concerns related to scanning: scan time and radiation dose. Biograph mCT’s Adaptive Dose Shield protects the patient from unnecessary pre- and post-spiral radiation, conserving 20% dosage in routine CT exams. With its ultra-low dose capability and super-fast PET acquisition time, Biograph mCT gives you everything you need. So scanning can be less stressful for you and your patients.
Unequalled efficiency to work in a true shared-services capacity.

No other CT promises as much return on investment as Biograph mCT. Its ability to do whole-body PET-CT scans in only 5 minutes enables it to be used in a true shared-services capacity. You can use it as a hardworking standalone CT or as a high-definition PET-CT. It gives you more options and more diagnostic power than any other CT.

With Biograph mCT, you can transform a single room into a fast, dual-modality scanning facility. Imagine offering advanced CT and PET imaging with one room; one team; one integrated system; one schedule; and if required, one comprehensive exam. You can save precious space, time, and cost — that would be required to implement such high-end systems separately — while maximizing dual-modality utilization.

And it is scalable and upgradeable. So your investment can keep providing returns and referrals well into the future.

We also backup Biograph mCT’s performance with our proven Siemens Remote Service (SRS), a proactive remote monitoring service that lets us detect and fix problems remotely. For example, our proactive solution can predict CT tube failure in advance. Sensors remotely monitor tube functions via real-time data flow with SRS and can detect deviations before problems occur. With SRS, we can expedite on-site repairs and keep your Biograph mCT performing in peak condition at all times. So you can get the highest uptime for unequalled throughput.

maximum-throughput CT.
Biograph mCT brings the latest integrated imaging technology in one small footprint, giving you the ultimate in diagnostic capability.

It gives you routine 5-minute whole-body PET·CT scans.

It gives you better patient care and comfort.

It gives you maximum throughput and return on investment.

And it gives you a host of reasons to say, “I want my mCT.”
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