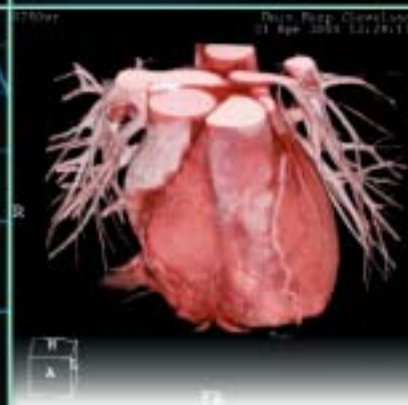
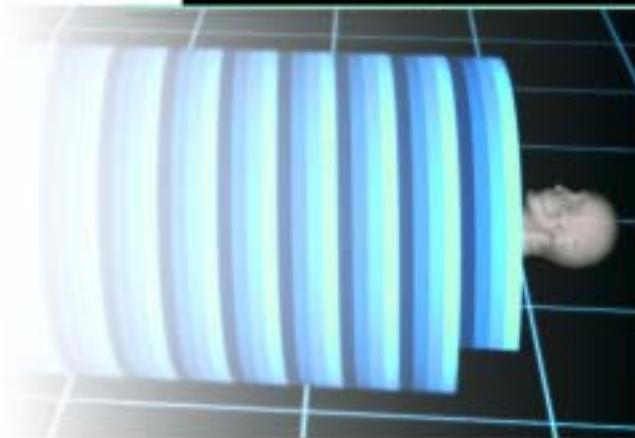


Computed Tomography

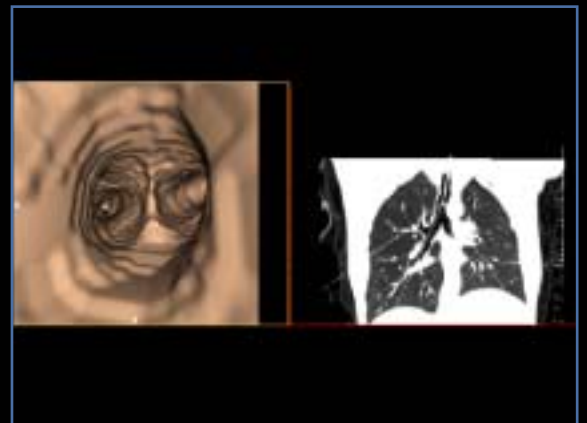
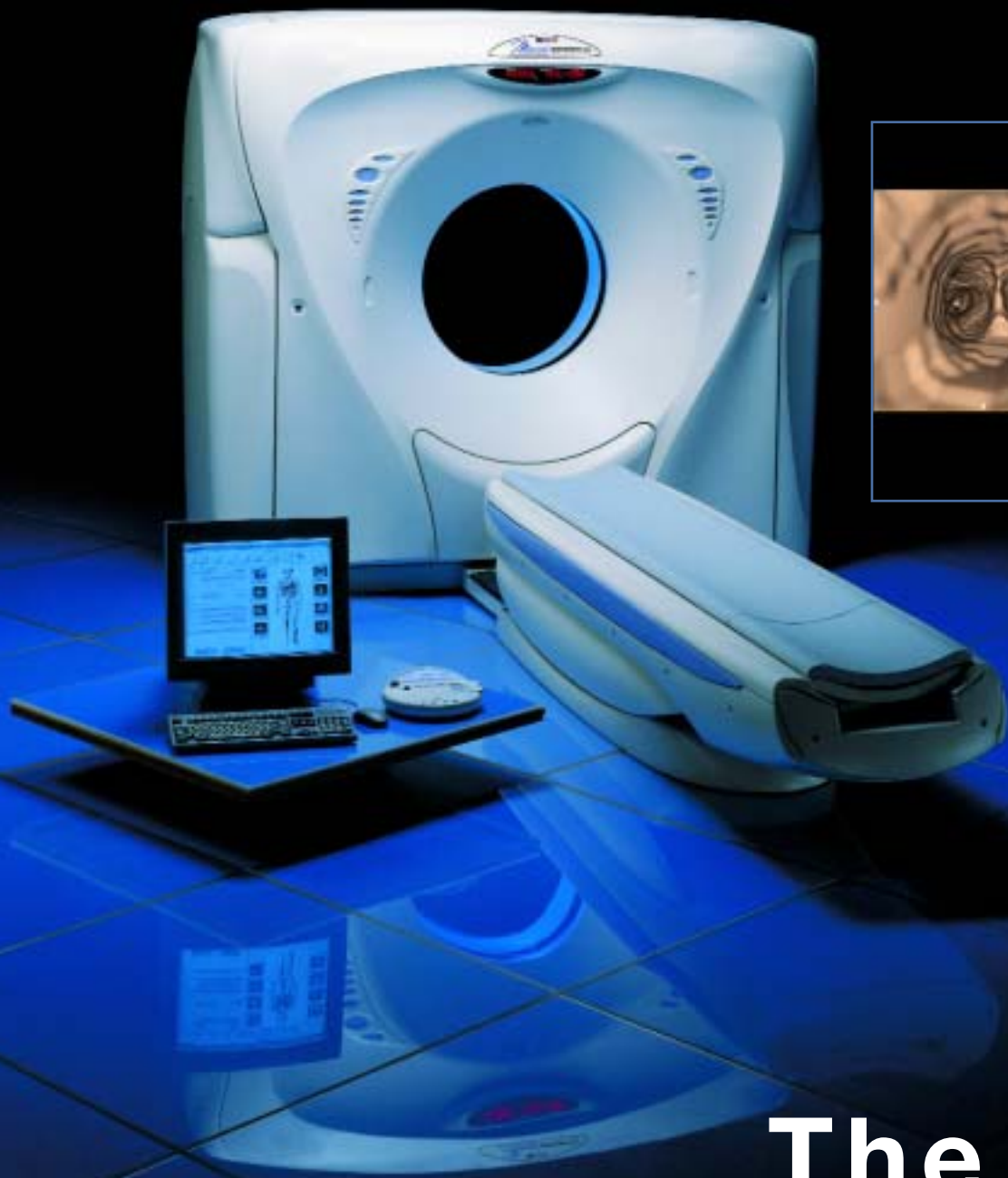


Mx8000

M8000

M U L T I S L I C E

Fast enough to stop the
Capable of delineating
Unprecedented imaging power for the



Virtual endoscopy

The gateway

motion of a beating heart.
anatomic structures as small as 0.25mm.
earliest, most accurate diagnosis.



Isotropic Imaging



Whole body CTA



Cardiac scoring

y to new applications

Multislice leadership



1988

R & D began on MxTwin™ multislice CT

1991

Beta testing began for MxTwin

1992

MxTwin introduced to market and first units delivered

1993

HeartBeat-CS™ clinical trials started

1994

200th MxTwin multislice unit installed

1994

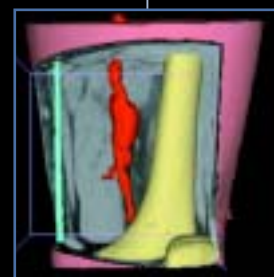
Evolving Imaging™ real-time multislice introduced.

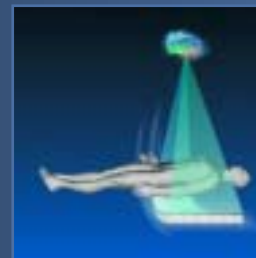
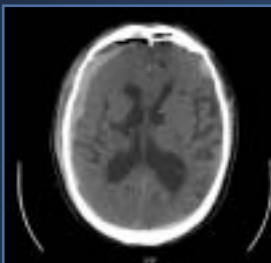
1995

First multislice clinical papers published using MxTwin

1997

Flexiscan™ prospective multislice reconstruction





1998

Mx8000 introduced and installed in clinical sites

1999

LifeFlight™ trauma triage system

2000

Dual-slice Mx8000 introduced

1999

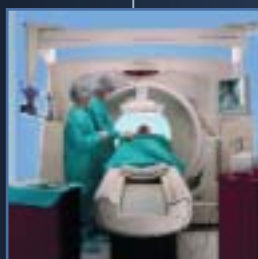
Over 15,000,000 multislice exams completed using Marconi multislice CT

2000

Version 2.0 released with Ultramerge™, perfusion, gated cardiac and other capabilities

2000

Next generation Mx8000

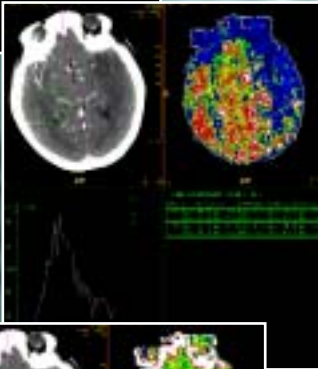
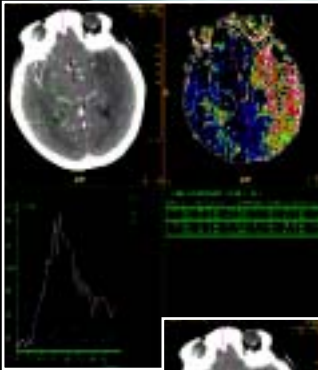


Over the past decade we've been completing thousands of scans a day. Constantly learning. Constantly refining. All in an effort to create a multislice computed tomography scanner with the best features and capabilities that deliver clinical performance with no compromises.

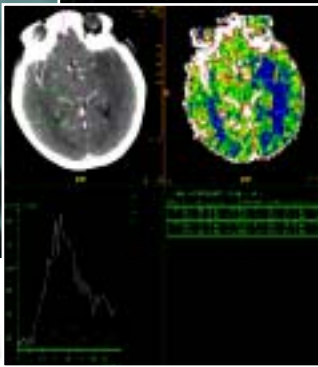
And now Mx8000 picks up where MxTwin left off by offering a dual-slice option. The dual-slice Mx8000 shares the same high-performance platform as its quad-slice counterpart, resulting in unmatched performance and reliability. Truly a second generation multislice CT. Just what you would expect from the company that invented multislice over a decade ago.

It's all about clinical results. Mx8000 opens up new opportunities in diagnostic efficacy that have been quickly established around the world. The revolutionary performance and clinical capabilities of Mx8000 improve patient outcomes, increase department productivity and greatly expand your referrals.

Time to peak



Mean transit time



Peak Enhanced



2.5mm thick



0.5mm thick

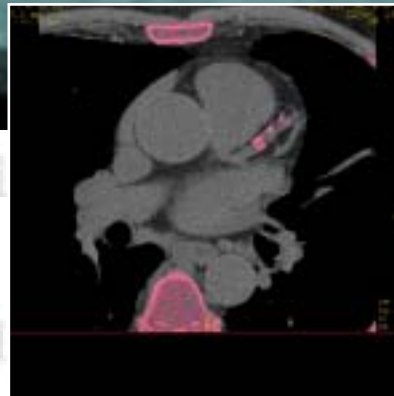
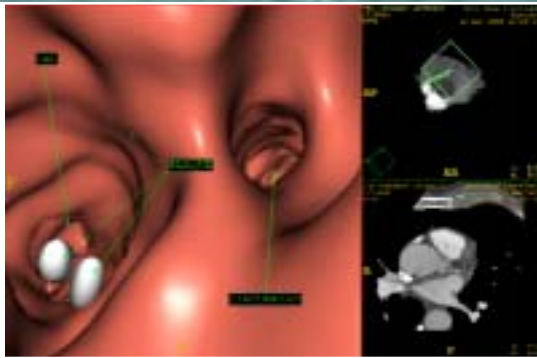
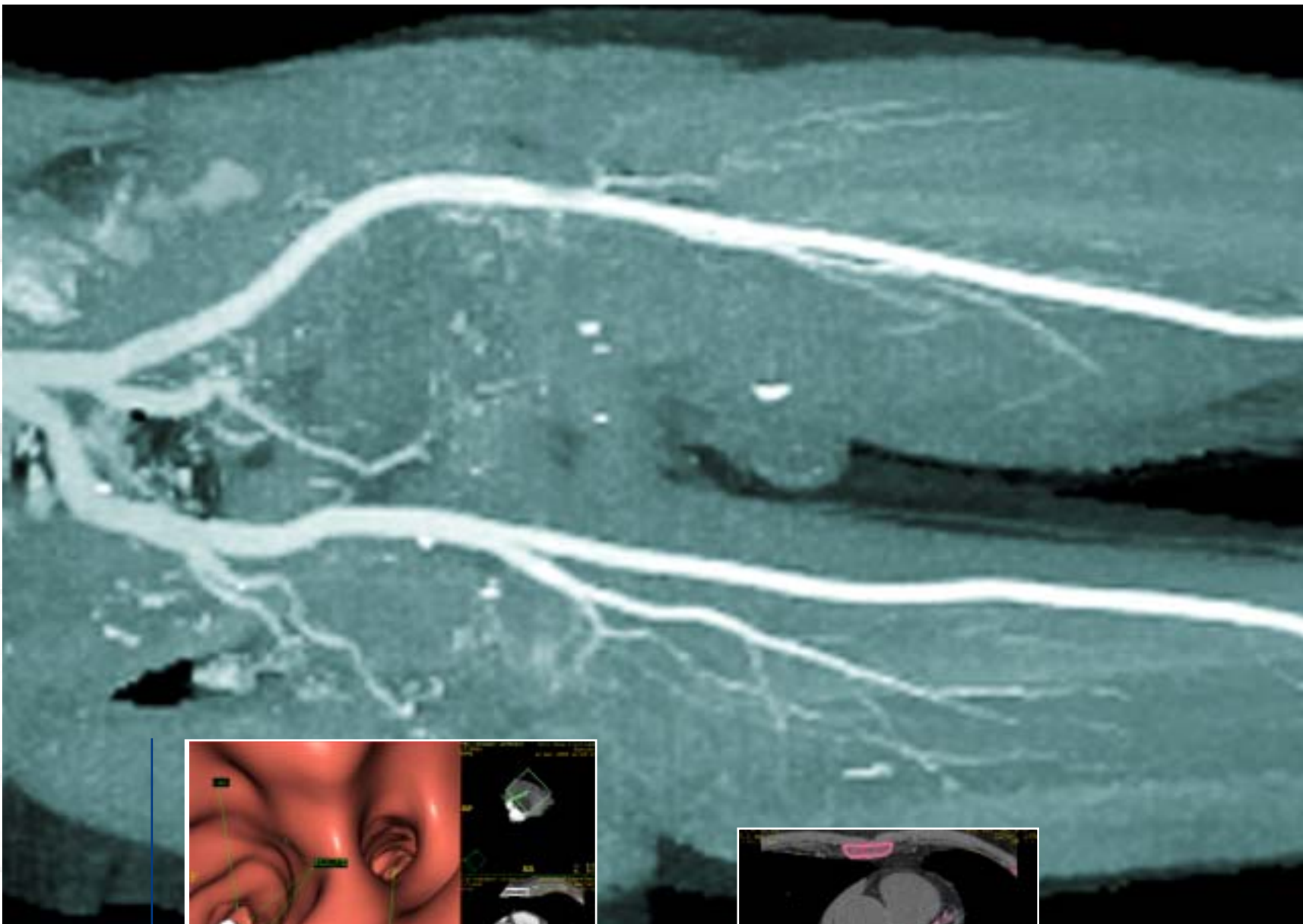
Functional CT

Functional changes in organs such as regional blood flow rate in the brain often appear well in advance of anatomical changes. By scanning with the high-speed Mx8000, and processing the data using its exclusive functional CT program, pathology such as a stroke can be identified while there is still time to optimize treatment of the patient. Perfusion imaging is standard on Mx8000's LifeFlight™ configuration.

Isotropic Imaging

Submillimeter isotropic scanning (0.5mm) with Mx8000 provides MPR and 3-D images that are as clear as directly acquired images. These thinner slices deliver a more detailed look at small, subtle lesions for earlier detection and more confident diagnoses.

Note this traumatic cervical spine study which was originally scanned with 2.5 millimeter thick slices. The MPR image was suspicious in the C1-2 region. Repeat scans were completed using 0.5 millimeter slice thickness and a fractured odontoid tip was easily identified. Improved resolution. Improved clinical confidence.



Cardiac Imaging

The ultimate test for a CT scanner's temporal resolution is the ability to stop the heart. With Mx8000, cardiac motion can be virtually frozen using routine half-second scan times or partial angle reconstruction. This allows revolutionary exams such as cardiac angiography and cardiac scoring which require "stop motion" imaging.

Cardiac imaging with Mx8000 improves the diagnosis of coronary artery disease and serves as a screening tool to provide early detection for patients with cardiac risk factors. Cardiac scoring cases can be evaluated on-board Mx8000 using Marconi's HeartBeat-CS, the only cardiac scoring package clinically proven on multislice CT technology and correlated to coronary angiography.

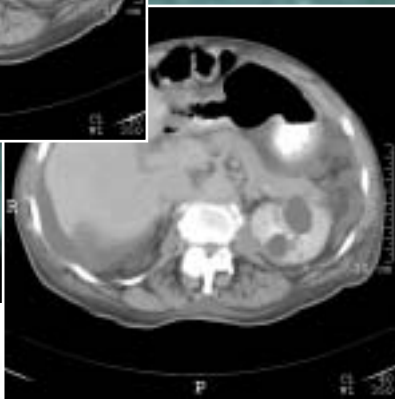
Arterial phase



Portal phase



Delay phase



Multiphasic Organ Imaging

Thin-section, multiphase spiral CT acquisition during optimal arterial and venous phase enhancement, significantly improves the accuracy of small lesion detection and overall characterization of neoplasms and obviates the need for other diagnostic tests. Multiphasic organ studies must be completed in less than 70-80 seconds after the start of the infusion of contrast. With Mx8000's ability to acquire eight slices per second, whole organs such as the liver, pancreas and/or kidneys can be scanned in as many as three phases in less than 80 seconds.

Whole Body CTA

CT angiography, typically limited to individual areas of the body with single-slice scanners, can be expanded to include the whole body for angiography screening on Mx8000. This is ideal in trauma situations where seconds can mean the difference between life and death and where pathology may be anywhere in the vascular tree.

This thoracic, abdominal, pelvic and lower-extremity CTA, was acquired in one acquisition in just 58 seconds using 0.5 second rotation time (eight slices per second) and 2.5 millimeter thin slices for the entire scan. Because Mx8000 permits the use of thin slices, resolution and overall image quality are not sacrificed for coverage. Note an aortic dissection from the arch to the iliac arteries.

thinner scan slices faster rotation
better resolution
earlier detection improved outcomes





High-res lung screening

Asymmetrix

Mx8000 is the platform for multislice CT today and tomorrow. Its modular design make it naturally upgradeable from dual to quad slice and beyond.

In the quad-slice configuration, Asymmetrix uses eight rows of detectors, with only seven gaps, achieving the optimum balance between clinical flexibility and maximum X-ray detection efficiency, for premium quality, low-dose imaging.

Both the dual and quad Asymmetrix detectors combine the world's best spatial detail and low contrast, low dose imaging for the highest quality CT images, even with large display matrices such as 768^2 or 1024^2 .

Normally, high-resolution scanning is reserved for small anatomic structures such as the IAC. Now, with the large display matrices, exams like high-resolution lung screening are routinely and confidently performed.



DFS

Mx8000 incorporates DFS™, Dynamic Focal Spot technology that delivers high-resolution imaging to identify even the most subtle pathologies. With DFS, the X-ray beam is oscillated to the focal track, effectively doubling the samples that reach each detector, giving you the greatest image quality possible. In fact, Mx8000 produces industry-leading ultrahigh spatial resolution of over 24 line pair per centimeter.





ESP II

All of the technology in the world is meaningless unless it's easy and practical to incorporate into everyday operation. Mx8000 features the ESP II™ graphical user interface (GUI) with 0.5 second image reconstruction. ESP II's instinctive and easy operation was designed to facilitate multislice workflow and is the only operating interface that accommodates both the experienced user and those new to multislice scanning.



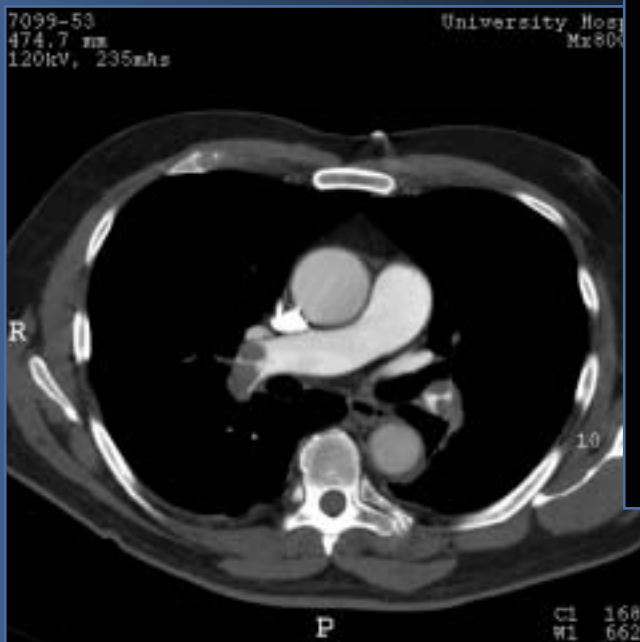
Pertinent scan information is shown during routine scan setup, and more detailed parameters for advanced exams can be accessed with a click of the mouse. All to immediately deliver the results that you demand at the highest productivity levels of any multislice scanner.

Innovative technology

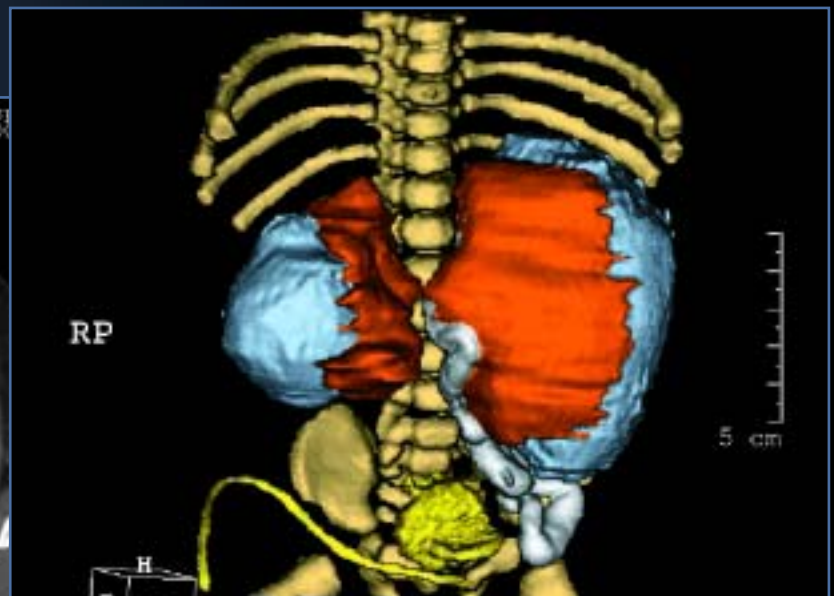
lower costs, increased throughput future security

Marconi's multislice solutions reach beyond Mx8000 and include filmless image review and World Wide Web access to studies. Image management products such as RadWorks™ and JPACS™ provide the infrastructure for your PACS network and the ability to seamlessly integrate multislice into your clinical portfolio.

When you purchase an Mx8000, your investment will carry you into the future. As the pioneer of the first multislice CT, we're continually exploring new applications. Mx8000 is the platform for multislice CT today and beyond. Its modular design make it naturally upgradeable from dual to quad slice. That's why today, Mx8000 users are doing things with multislice that nobody else is thinking about.

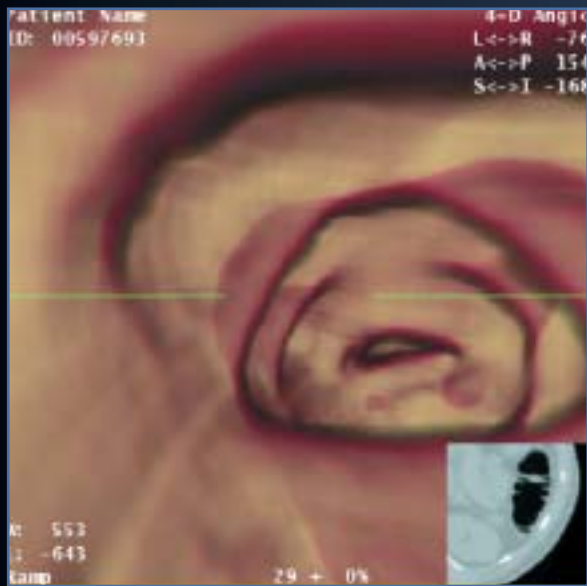


Pulmonary embolus imaging

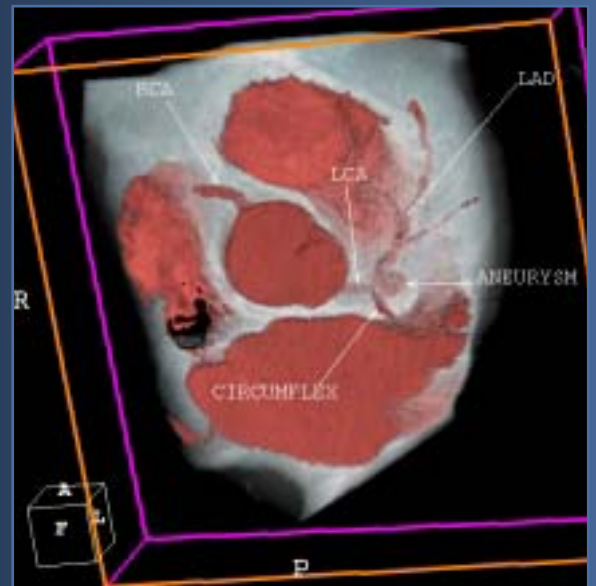


Low dose pediatric

Clinical confidence



Virtual Colonoscopy



Cardiac gating



Medical Systems

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