

GE Medical Systems

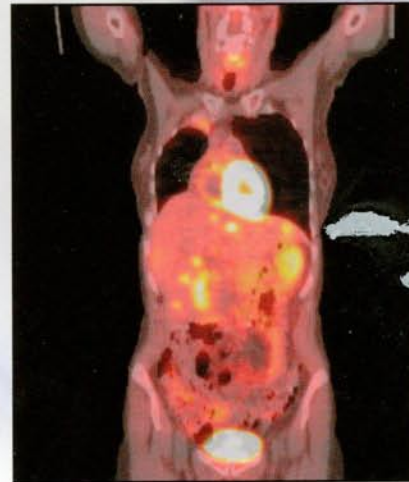
# Discovery ST

PET/CT Scanner

imagination at work



## Two Views



# one vision

## **Sharing your dedication to patient care**

When the question is cancer, heart or brain disease, the stakes are high and so are the emotions. You demand technology that lives up to the challenge. A scanner that instills superior diagnostic confidence to present your patients with clear, precise diagnoses.

At GE Medical Systems, we share your passion. Our scientists and engineers continue to advance our Positron Emission Tomography and Computed Tomography (PET/CT) imaging systems to give you ever-more precise diagnostic tools. Diagnostic scanners that combine function and anatomy – taking you from diagnosis to treatment planning in one complete scan.

## **A single scan. A world of answers**

GE Medical Systems introduces Discovery ST, the most powerful non-invasive diagnostic tool yet for evaluating a range of diseases.

Designed from the ground up, we present you with an advanced scanner that combines PET and CT into one inherently registered image. These fused images capture essential information from each imaging technology to shed new light in oncology, cardiology and neurology.

## **Seeing completely. Treating accurately**

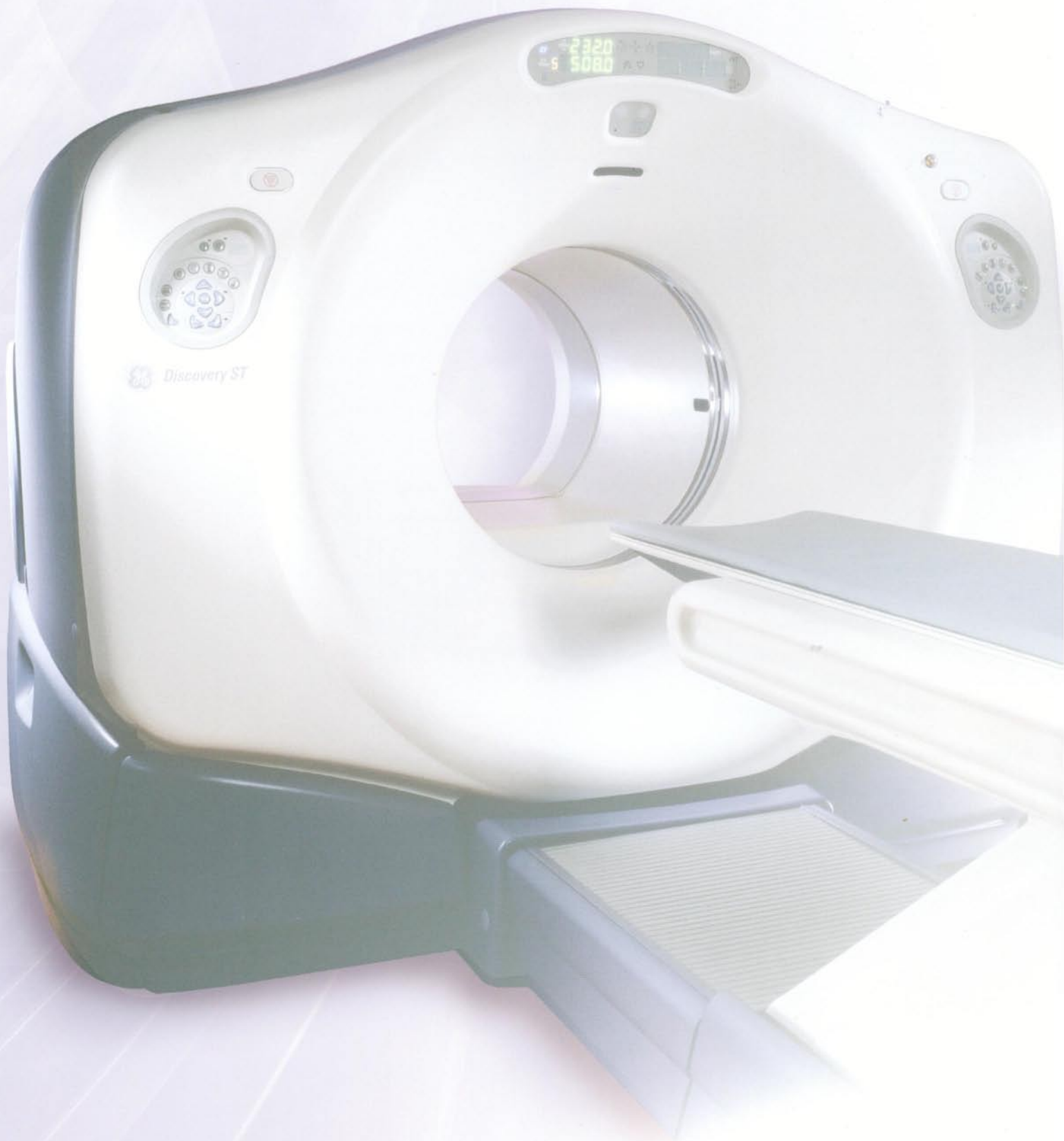
Anatomy and chemistry. Form and function. That's the beauty of Discovery ST. With a single streamlined examination, Discovery ST sharpens your clinical vision by merging two advanced modalities: PET and CT.

Taking advantage of CT and advanced algorithms, you can peer into your patient's body to see precise anatomy. Then advanced PET technology captures the metabolic activity of cells. As a result, Discovery images:

- Reduce unnecessary tests and exploratory surgeries
- Boost diagnostic confidence
- Enhance the quality and comfort of patient care
- Eliminate inferences and guesswork
- Provide cost-effective healthcare delivery through early diagnosis of disease







Discovery ST

# Newly designed diagnostic platform.

The new Discovery ST is the result of technological innovation focused on improving your productivity while enhancing patient care. GE Medical Systems pioneered the concept of PET/CT imaging in 2001 with Discovery LS, ushering imaging into a new age of information.

Now, our new Discovery ST scanner takes diagnostic imaging even further. It's the first PET/CT scanner in the industry to offer you more features and functions for delivering answers in oncology, cardiology and neurology. These engineering innovations result in more precise images, higher productivity, easier siting and ultimately – better healthcare delivery.

## **Innovation at every level**

- First PET/CT system designed from the ground up for PET/CT imaging, with a fully integrated compact gantry optimized throughout for fusion imaging
- Ultra-sensitive PET BGO detector offering the industry's highest photon stopping power and highest sensitivity
- Ultra-reliable GE performance based on rigorous GE Six Sigma design and highly integrated PET and CT businesses for optimal design and manufacturing
- Mobile ready to bring PET/CT technology to every community
- Upgradeable and poised for emerging applications, its scaleable technology is backed by GE product upgrade continuum

- Simplified siting, installation and servicing, with compact, modular design and slim form factor

## **Productivity booster**

- Exceptionally fast PET/CT scan time, typically from 1.5 to 3 minutes per bed position, 10- to 20-minute total scan time
- Only 70-cm bore PET/CT system offering both 3D and 2D PET acquisition modes, rigorously designed to ensure consistent high-quality imaging for patients of all sizes
- Industry-leading full-featured GE LightSpeed CT with variable speed scanning, high light output and z-axis uniformity, and CT attenuation correction

## **Elevated patient care**

- Setting new standards in patient comfort and quality of care with the industry's shortest 100 cm bore length and a large 70 cm bore width, minimizing patient claustrophobia and enhancing patient positioning for radiation therapy planning
- Excellent connectivity to all radiation therapy planning systems through PET and CT DICOM 3.0 to pinpoint radiation therapy delivery



## Advanced applications for clear disease visualization.

Discovery ST leads the industry with its innovative non-invasive PET/CT applications – giving fresh vision to oncology, cardiology and neurology disease states. With the precise, fused images gathered from a PET/CT scan, you'll hold the information necessary for diagnosing and managing these life-threatening diseases for your patients. Discovery ST brings vital information together to help you better see, understand and heal.

### Your essential insight into cancer

Discovery ST was designed to excel in advanced cancer diagnosis. The fused images give you precise information for cancer care along the entire diagnostic and treatment path. Several leading cancer centers have selected a Discovery as their preferred PET/CT scanner.<sup>1</sup>

Discovery ST provides early identification of possible cancer, indicated by areas of increased cellular activity through PET. This metabolic information indicates whether a cancer is growing slowly or aggressively. Then precise CT information communicates the size and location of a lesion and the surrounding anatomical structure. When fused as one, you receive a highly accurate profile of a disease, helping to effectively plan the course of treatment.

Armed with greater information, you can address the pressing questions surrounding cancer quickly and accurately. Discovery ST helps to:

- Identify a cancerous malignancy earlier than other imaging technologies and pinpoint tumor location
- Differentiate malignant and benign tumors and determine the presence, location and extent of multiple lesions, recurrences and metastases
- Guide selection and delivery of cancer treatment – surgery, radiation therapy or chemotherapy
- Demonstrate response to therapy