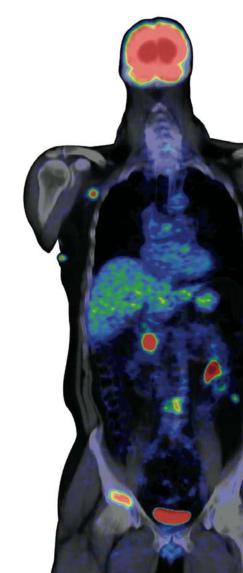
# **Discovery**™ Understanding PET/CT imaging





## Blending two body images into a single sensation

Discovery imaging systems blend two essential and complementary medical imaging technologies on one breakthrough scanner.

The systems have the unique ability to capture two types of medical images with one machine – positron emission tomography (PET) and computed tomography (CT). All at the same time.

Discovery systems combine these two images into a single image and present combined results to aid physicians in making treatment decisions.

On the PET image, the physician sees how the body is functioning. On the CT image, the physician sees the body's anatomic structure. When combined into a PET/CT image, the patient's complete picture is revealed

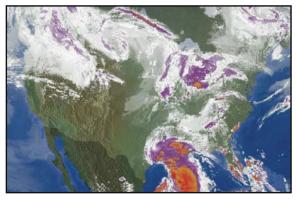
By merging these two imaging technologies into one scanner, physicians gain exceptional images that would normally take two scanners to accomplish in twice the time. Plus, with the patient lying in the exact same place during the exam, the images mesh perfectly. To understand this concept better, think about a satellite weather map seen on the news.

The map reveals weather patterns gathered by satellites that show storm intensities. A geographic map of the United States lies above this "functional" image to serve as the "structural" image. With one image on top of the other, meteorologists share the whole picture. People can see what areas are being affected by adverse weather so they can respond appropriately. The same analogy works with PET/CT imaging.

#### PET



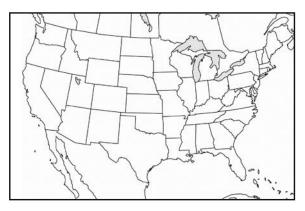
A PET scan reveals areas of abnormal activity but the exact location is unknown.



A satellite weather image shows areas of intense weather activity but doesn't illustrate a geographic context to fully understand the image.

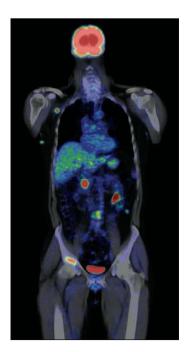


A CT image precisely displays the body's anatomy but does not reveal the body's functional chemistry.

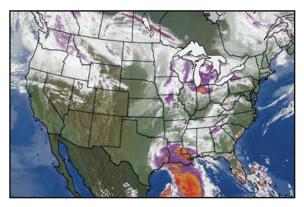


The map of the United States shows the outlines of the states but doesn't show weather activity.

### PET/CT



By blending the functional body image and the structural body image into a PET/CT image, physicians now can see problem areas and know precisely where this activity is taking place to help them make appropriate treatment decisions.



A geographic map combined with a satellite image of weather patterns shows exactly where severe weather is headed so people can prepare accordingly.

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GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our "healthymagination" vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality and efficiency around the world.

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