The time has come

Philips GEMINI TF PET/CT with TruFlight technology

PHILIPS

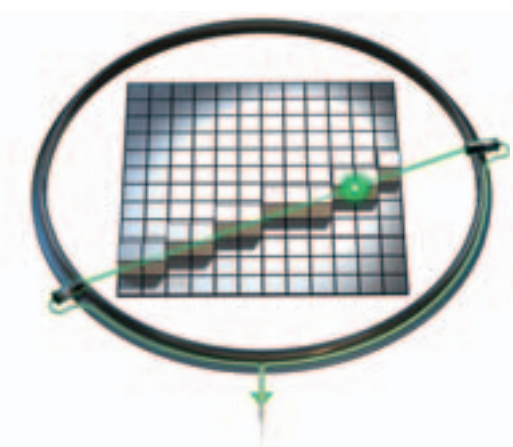
TruFlight has arrived

Time-of-flight technology has always held the promise of better PET imaging. But it took Philips to harness its potential, making it work in ways that make sense for you and the way you work.

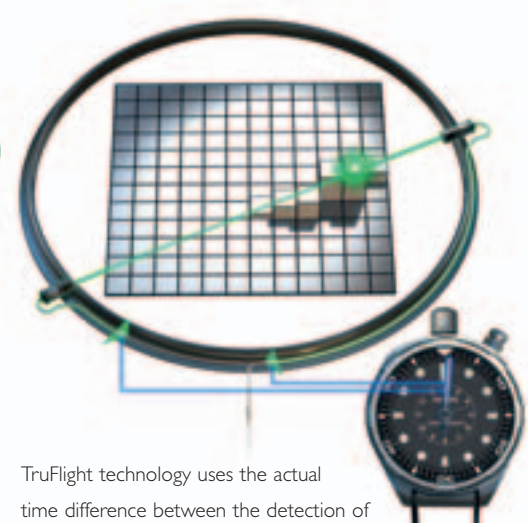
By capturing the time difference between coincident photon detection, Philips TruFlight technology acquires and processes data in a totally different way than conventional scanners. It helps you see more than ever for more types of patients.

Philips GEMINI TF with TruFlight technology. It's changing the way you see PET/CT. It's changing the way you see your patients. And it's changing the way your patients see you.

Philips TruFlight: The solution to better PET imaging



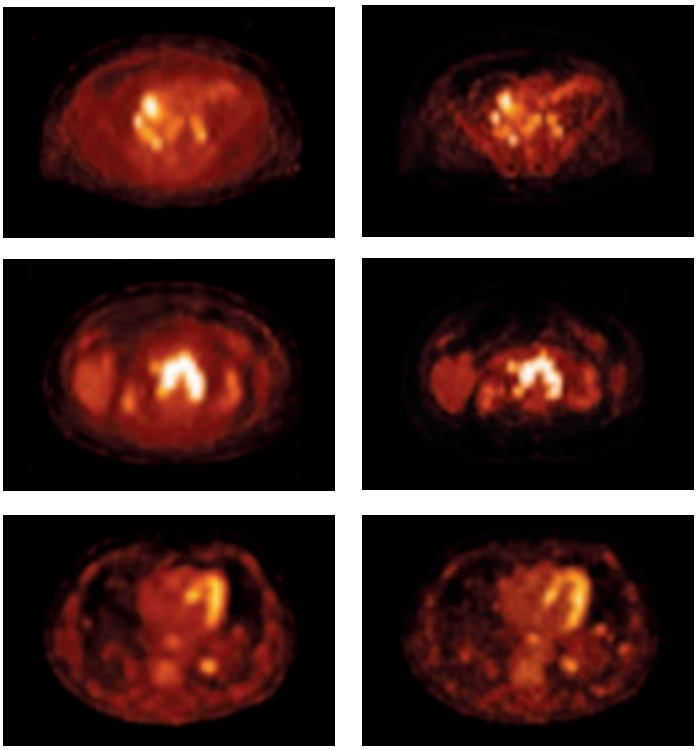
In conventional PET imaging, it's possible only to know that a coincident event has taken place on the line of response, but not the actual location of the event.



TruFlight technology uses the actual time difference between the detection of coincident events to more accurately identify the origin of the annihilation. Better identification leads to a quantifiable improvement in image quality.

Without time-of-flight imaging

With time-of-flight imaging

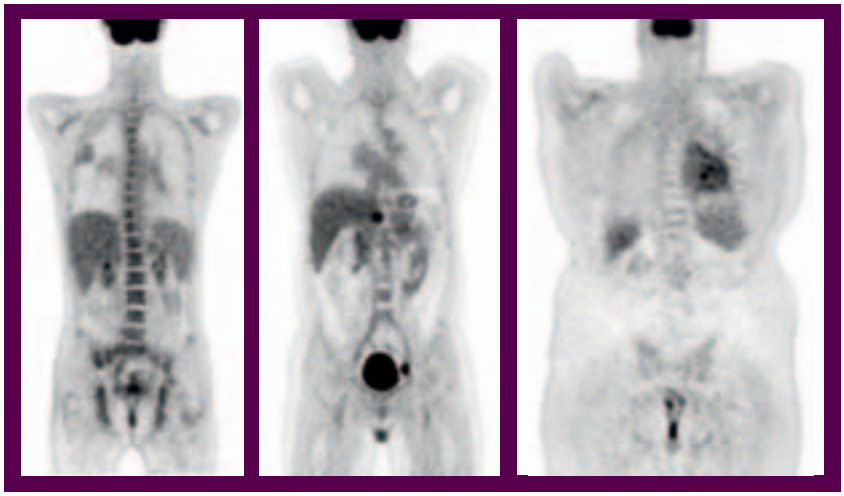


Time-of-flight technology improves PET image quality and reduces noise.

Clinical images courtesy of the Hospital of the University of Pennsylvania.

Perfect for every body

That means you. Your patients. And everyone else interested in unleashing the true potential of PET/CT. Enjoy consistent image quality across all types of studies – with virtually any size patient – at minimal dose levels and with whole-body PET acquisition times of less than 10 minutes.



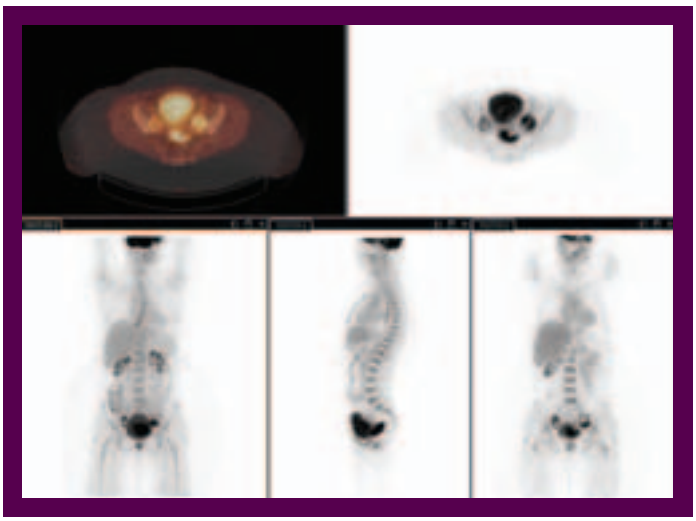
TruFlight PET technology provides increasing sensitivity gains as patient girth increases, translating into improved image quality for patients of every size.

Images courtesy of University Hospitals Case Medical Center and Montefiore Medical Park.

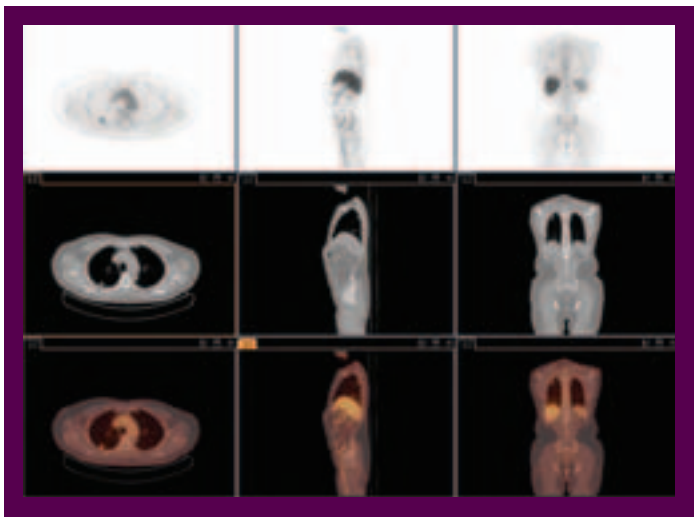
GEMINI TF is your perfect opportunity to see even more:

- Increase diagnostic confidence by improving sensitivity compared to conventional PET.
- Enjoy unprecedented image quality with large patients.
- Experience lower levels of noise, particularly when imaging small lesions.
- Capitalize on workflow advances with the extended Brilliance Workspace with PET/CT Viewer.
- Seize the potential of molecular imaging through low count-rate imaging applications.

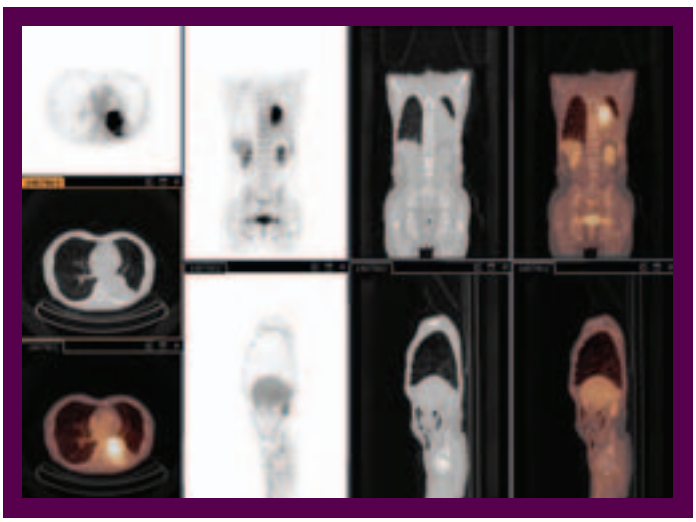
Perfect for oncology



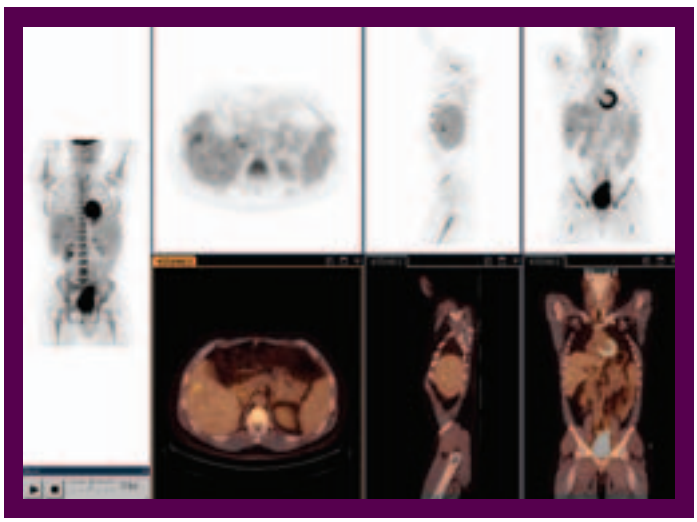
Cervical cancer (113.4-kg patient). Scan protocol:
TruFlight PET: 11 mCi, ^{18}F-FDG, 60 min PI, 9 beds, 2 min/bed
CT: 120 kV, 100 mAs, 5-mm slice



Lung cancer (84.8-kg patient). Scan protocol:
TruFlight PET: 11.2 mCi, ^{18}F-FDG, 60 min PI, 9 beds, 1 min/bed
CT: 140 kV, 100 mAs, 5-mm slice



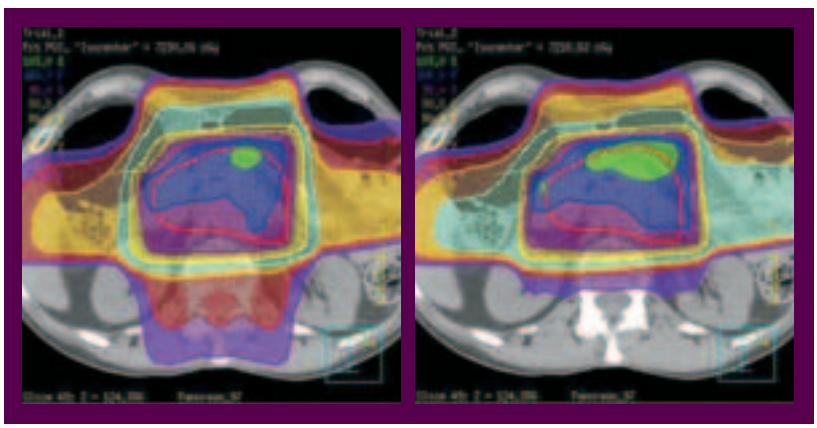
Staging lung cancer (75-kg patient). Scan protocol:
TruFlight PET: 12.3 mCi, ^{18}F-FDG, 60 min PI, 9 beds, 1.5 min/bed
CT: 140 kV, 44 mAs, 5-mm slice

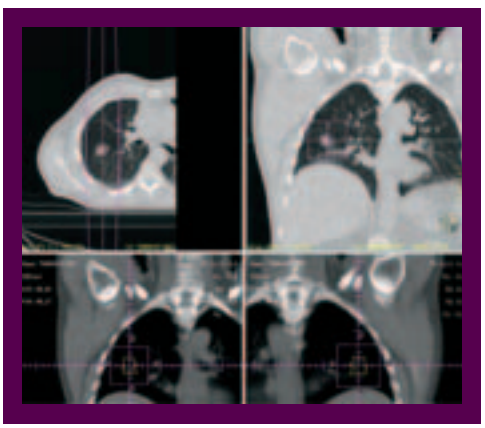


Colorectal cancer (103-kg patient). Scan protocol:
TruFlight PET: 12.3 mCi, ^{18}F-FDG, 60 min PI, 9 beds, 1.5 min/bed
CT: 140 kV, 20 mAs, 5-mm slice

Images courtesy of University Hospitals Case Medical Center and Montefiore Medical Park.

Perform rapid PET/CT examinations. Visualize smaller lesions with unprecedented confidence through quantifiable improvements in image accuracy and sensitivity with virtually any size patient.



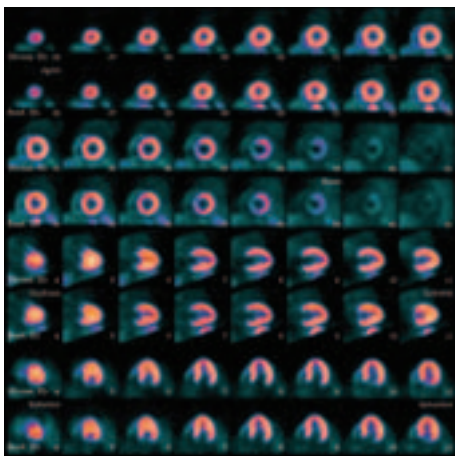


Perfect for radiation therapy

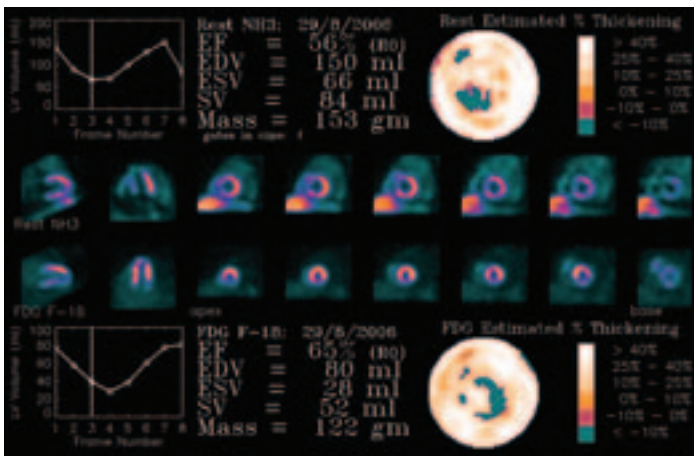
Simultaneously improve accuracy, workflow, and patient comfort by integrating CT/PET simulation, respiratory gating, and patient marking.

Perfect for cardiology

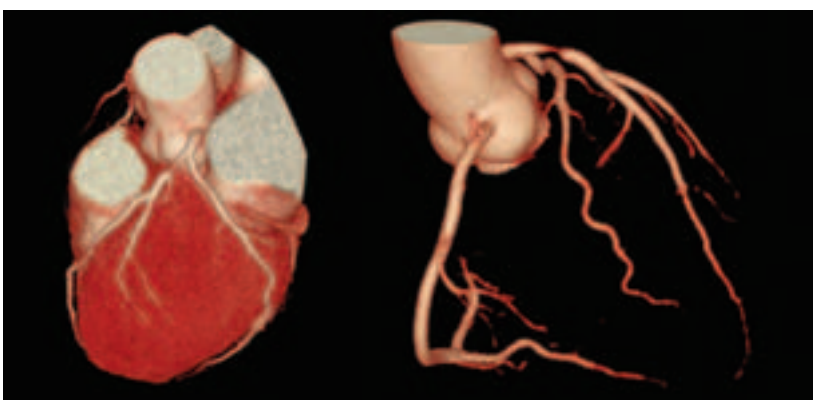
Enjoy greatly improved ECG gated image quality; integrate quantitative, dynamic cardiovascular evaluation and analysis.



PET myocardial perfusion imaging with ^{82}Rubidium (136-kg patient). Scan protocol: TruFlight PET: 40 mCi ^{82}Rb for stress and rest images; CT: 120 kV, 115 mAs.

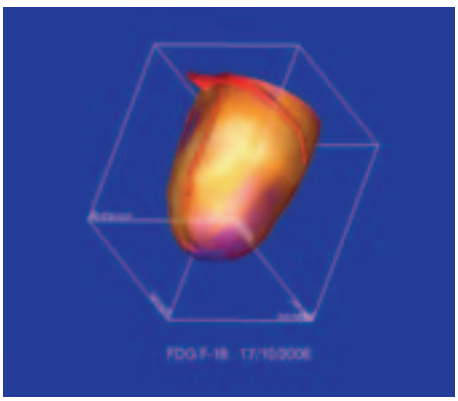


Gated PET myocardial viability imaging with ^{13}N-ammonia and ^{18}F-FDG (110-kg patient). Scan protocol: TruFlight PET: 20 mCi ^{13}N-ammonia, 10 min PI, 1 bed at 10 min followed by 12 mCi ^{18}F-FDG, 45 min PI, 1 bed at 10 min; CT: 120 kV, 115 mAs.



Cardiac CT angiography with coronary artery segmentation.

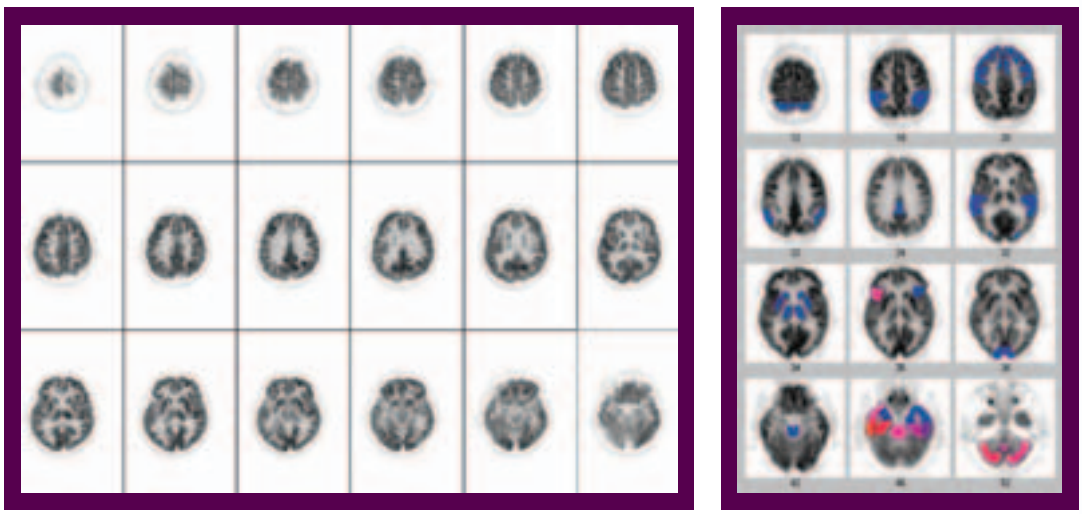
All images courtesy of University Hospitals Case Medical Center and Montefiore Medical Park.



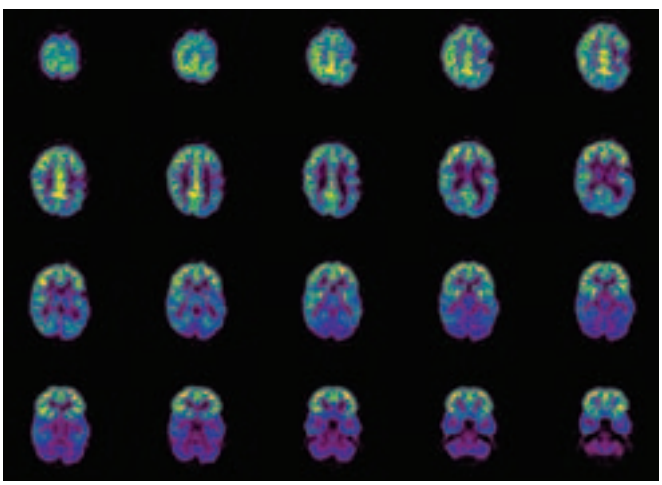
Fusing functional PET image data with anatomic CT data increases diagnostic correlation.

Perfect for neurology

See a new benchmark in spatial resolution and perform high-resolution brain studies and analysis faster.



^{18}F-FDG PET brain imaging and quantitative analysis to evaluate neurodegenerative disease. Scan protocol: TruFlight PET: 10 mCi ^{18}F-FDG, 45 min PI, 10-min scan.



^{18}F-FDG PET brain imaging to evaluate epilepsy. Scan protocol: TruFlight PET: 10 mCi ^{18}F-FDG, 45 min PI, 10-min scan.

Images courtesy of University Hospitals Case Medical Center.

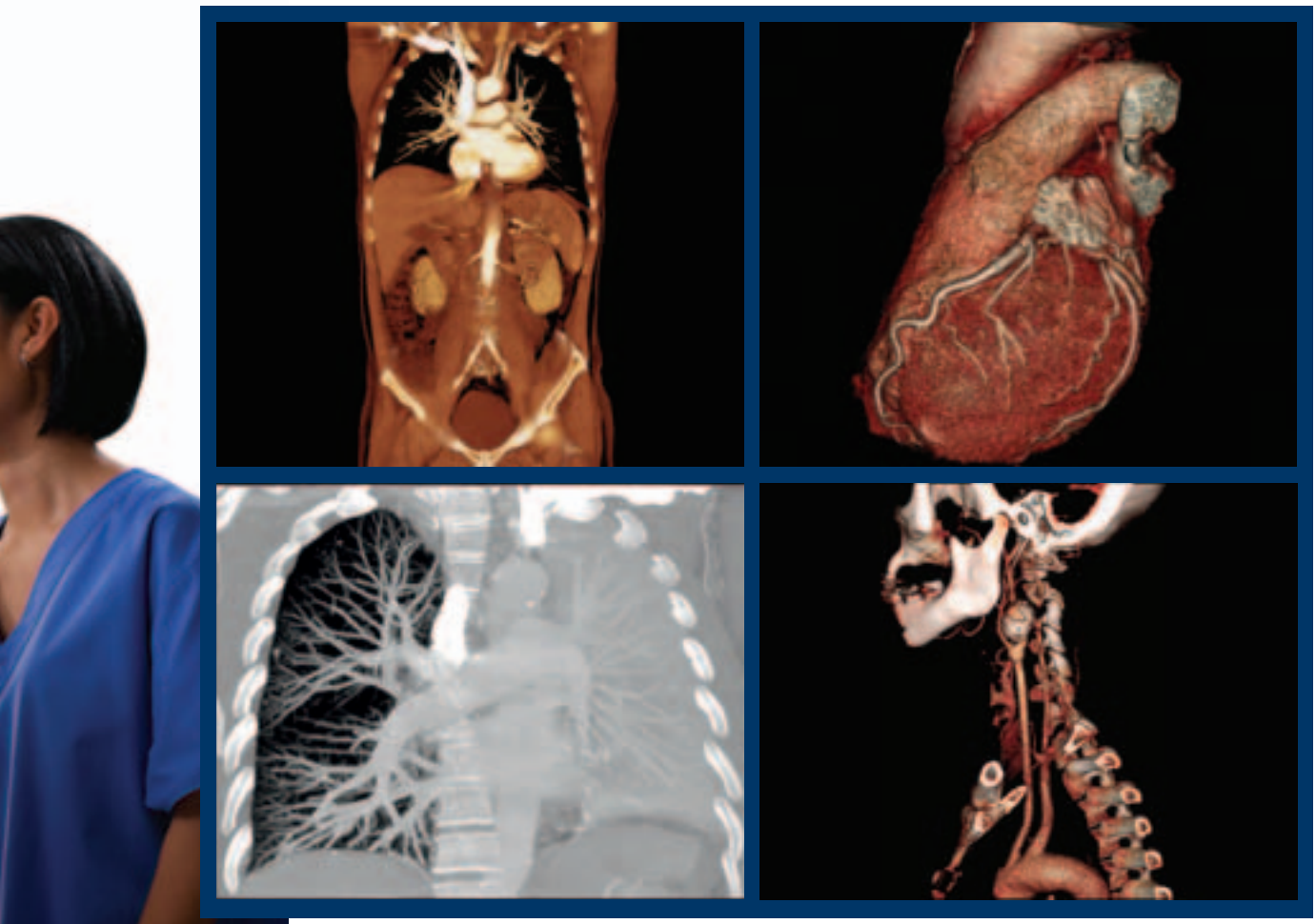
Perfect for molecular imaging

Enable low-statistics dynamic imaging and create new opportunities to work with low count-rate molecular imaging tracers.

- Optimize your work with low count-rate imaging tracers using the exceptional sensitivity of TruFlight.
- Satisfy the most demanding clinical and research applications through superior count rates.
- Gain flexibility and absolute control of acquired data with list mode, used for all applications.
- Access advanced tools for manipulating list-mode data with the optional research toolkit.
- Customize dynamic and gated acquisition protocols for research applications.

Brilliance in action

Because you'd expect nothing less than the most refined CT capabilities, GEMINI TF is fully configured for use as a Brilliance diagnostic CT system. Brilliance is renowned for its advanced, yet easy-to-use, applications and the technologies that power them.



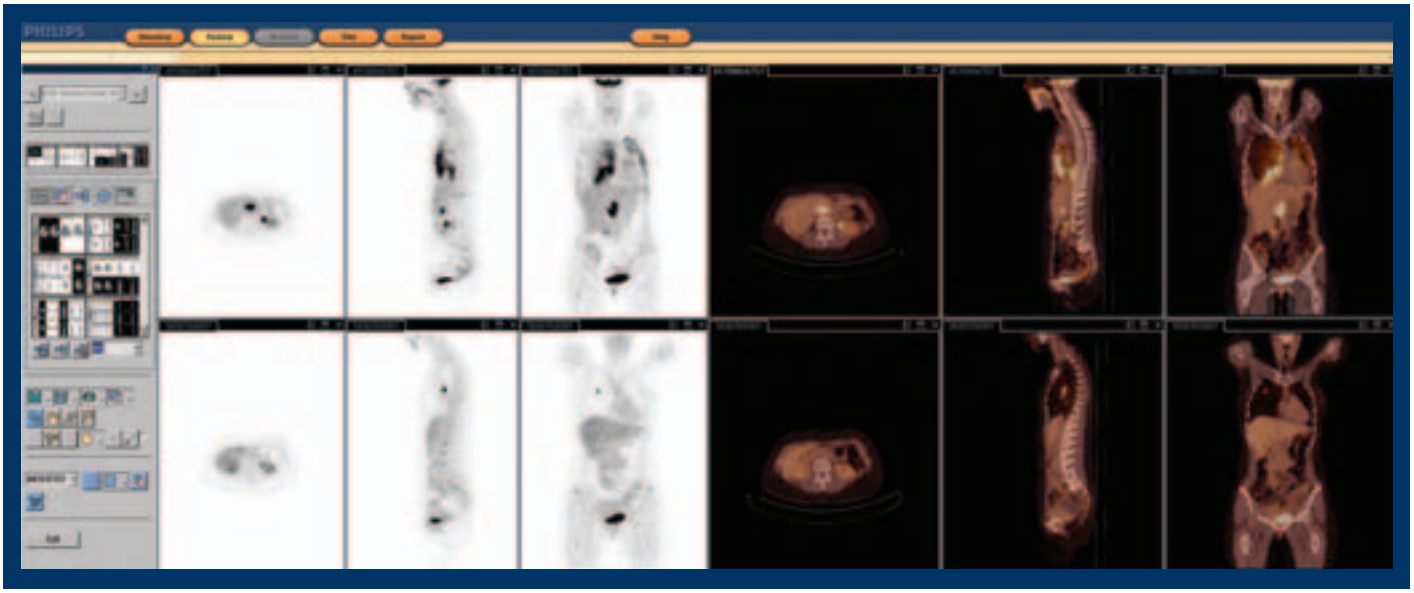
Perfectly open for you

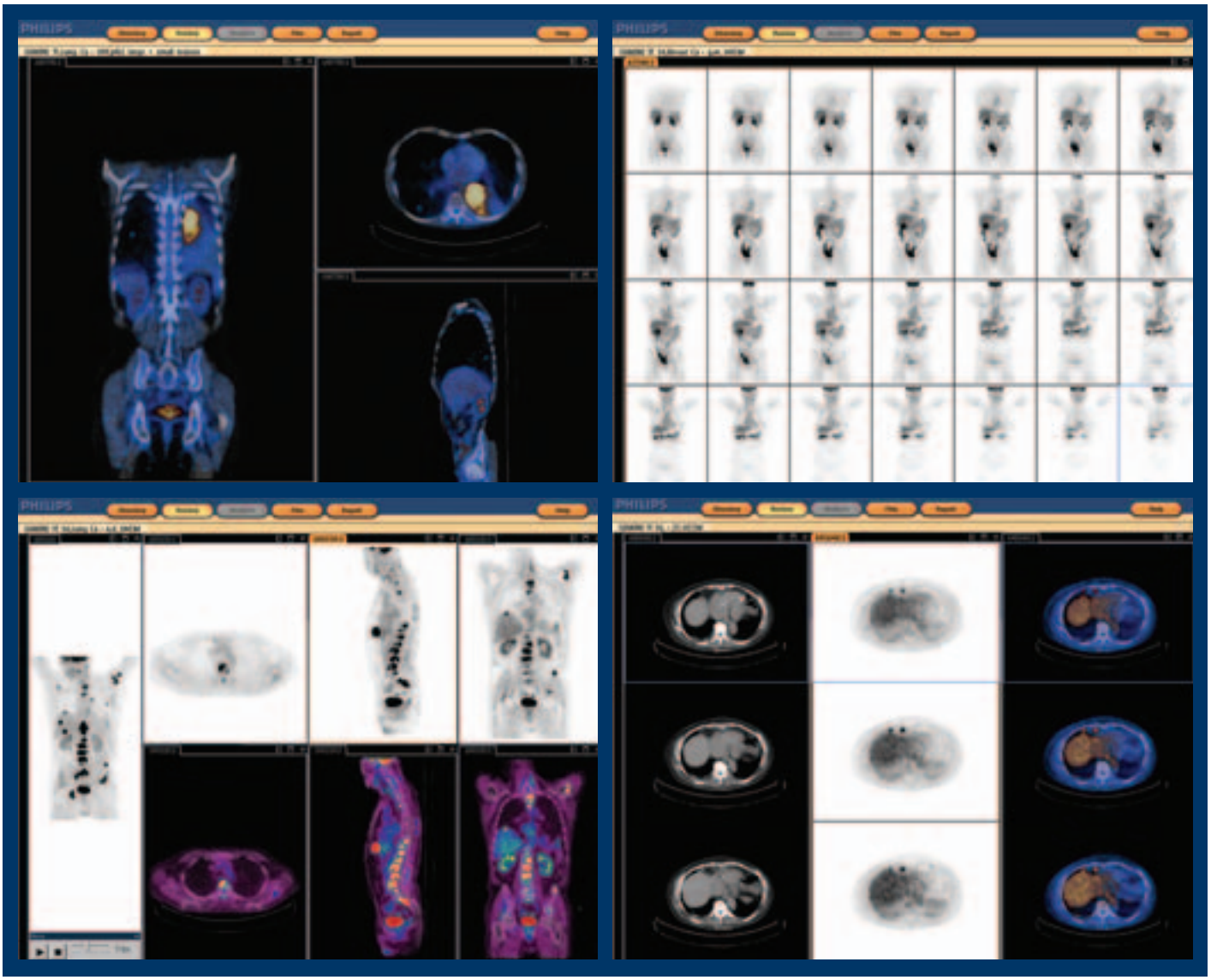
Drawing from the latest in Philips design, GEMINI TF features the unique OpenView gantry for greater comfort for your patients and better results for you. It enables important efficiencies through a 190-cm scan length for both PET and CT, and enhances access for improved patient care.

and your patients

Fast, personal, and easy for better workflow

Diagnose with more speed and efficiency using the extended Brilliance Workspace with PET/CT Viewer. Experience immediate responsiveness, maximum automation, and ultimate personalization. Communicate results to referring physicians faster and more conveniently.





A flight for the future

At last you can experience GEMINI TF with TruFlight technology, a dramatic breakthrough that takes time-of-flight imaging from dream to clinical reality. Acquire excellent PET images across all types of studies and at minimal dose levels in 10 minutes or less with virtually any size patient.

Increase diagnostic confidence by decreasing equivocal studies through greater effective image sensitivity.

Accelerate your workflow with stunning advances in the extended Brilliance Workspace with PET/CT Viewer.

Embrace the potential of molecular imaging through opportunities with new agents and applications.

And the best part? Because it's from Philips, you know that every step is grounded in sense and simplicity.

GEMINI TF. Perfect for every body.

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