nanoScan® PET/CT

Real dynamic PET-system designed for quantitative studies

Mediso

Founded
1990

Offices
7

Employees
300+

Publications
3200+

Countries
100+

Preclinical systems
300+

Clinical systems
1350+

About us

Mediso works in the field of **medical imaging for 30+ years** with a profile of development, manufacturing, selling and servicing standalone and multi-modality imaging devices. The company offers complete solutions from hardware design to evaluation and quantification software for clinical patient care and preclinical research.

Mediso has a leader position in the preclinical imaging market with **over 300 commissioned systems** around the world. Beyond the market leading **nanoScan®** **PET/CT** and **SPECT/CT**, Mediso also offers standalone **MRI** and integrated **PET/MR**I systems based on a cryogen-free magnet with 3T or 7T field strength and a PET insert for simultaneous PET/MRI imaging. Products are sold directly or through a distribution network in 100+ countries worldwide

1990
Mediso founded

1994
Introduction of the first Mediso gamma camera

2000
Nucline™ X-ring/4R, 4-head dedicated brain SPECT

2006
Launching the first Mediso preclinical system the NanoSPECT/CT

2010
Launch of nanoScan® PET/CT, world's first ever sub-mm resolution preclinical PET/CT

2013
Mediso USA founded

2014
MultiScan® LFER 150, world's first sub-mm resolution mobile PET/CT

2015
AnyScan® TRIO SPECT, introduction of triple SPECT detector family

2016
Introducing the nanoScan® PET/MRI 3T world's first superconducting preclinical PET/MRI

2018
Installation of the 100th nanoScan® PET system

2022
Installation of the 300th preclinical imaging system

2023
Launch of the nanoScan® MRI 7T and the PET Insert

Key features

PET systems

Highest resolution:
<0.7 mm

Largest transaxial field of view
12 cm

Largest axial field of view
15 cm
for **total-body scanning**

Highest count rate performance
1300 kcps @ 80 MBq / 2.16 mCi
- **Multiple animal** imaging
- Imaging of **short half-life isotopes**

Best NEMA sensitivity
10.5% (250–750 keV)

Best Minimal Detectable Activity
60 Bq

Largest installation base
>150 systems

DESIGNED FOR DYNAMIC STUDIES

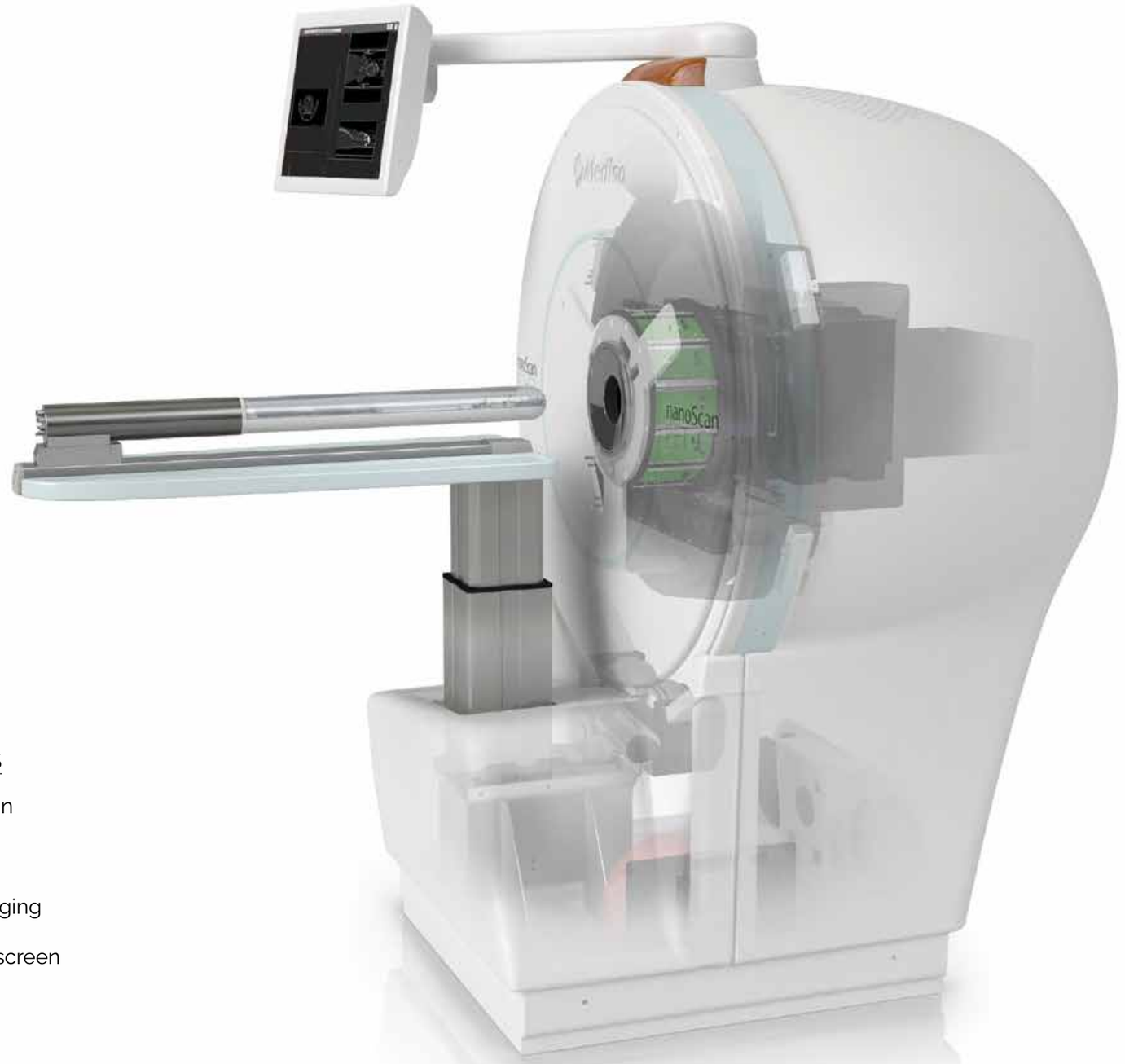
Freely accessible animal during the scan

Single FOV whole-body rat imaging

Minimized dead space for dynamic imaging

Start dynamic acquisitions from touch screen

Animal monitoring up to 4 animals



CT system

High-resolution: **30 µm**
with small voxel size: **10 µm**

Up to **×7.6 zoom**

Largest transaxial field of view:
12 cm

Highest power: **80 W** X-ray tube for
- Large animals
- Better image quality
- Fast scanning
- *Ex vivo* samples

Ultra-low dose protocol:
<1 mGy for whole-body mouse

Real-time Feldkamp and
iterative reconstruction

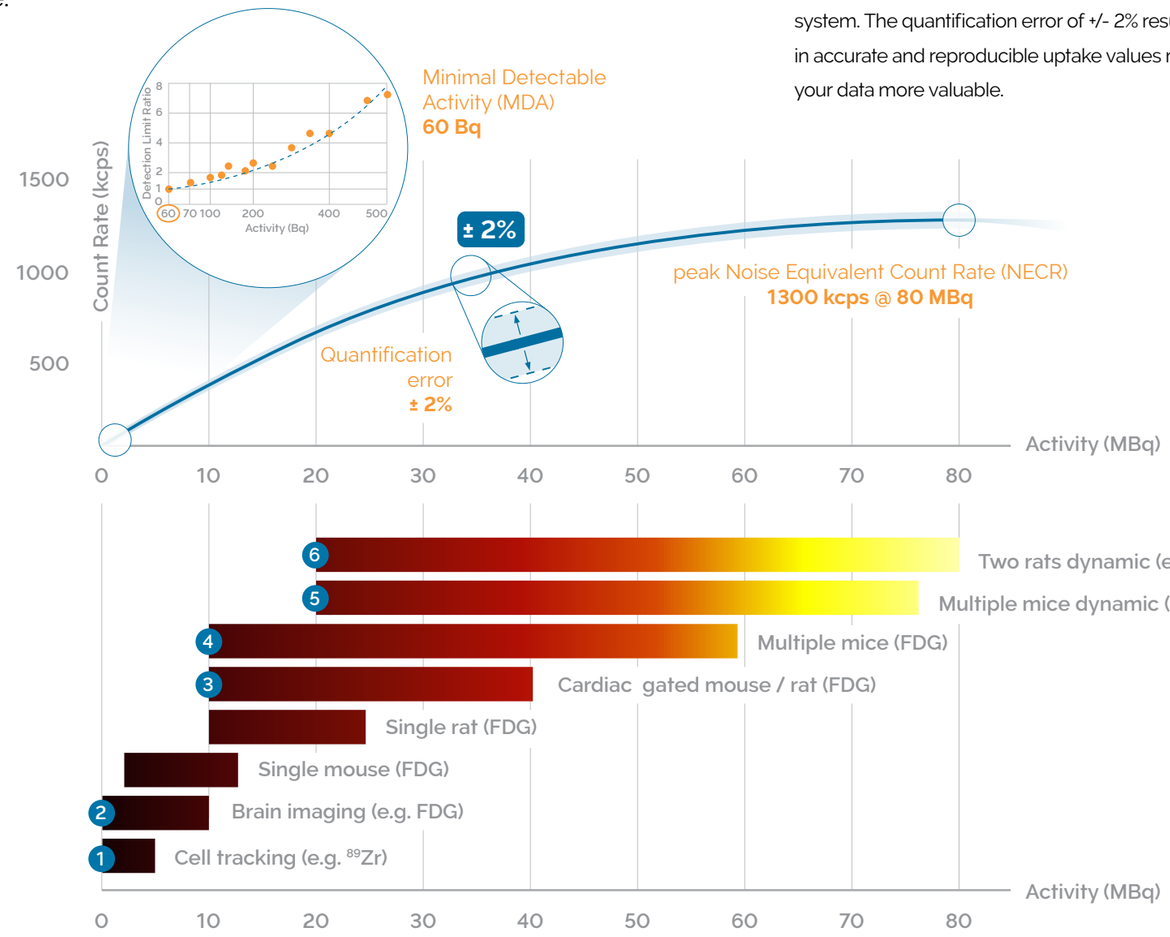
Respiration and cardiac gated reconstruction

Quantitative imaging for all applications

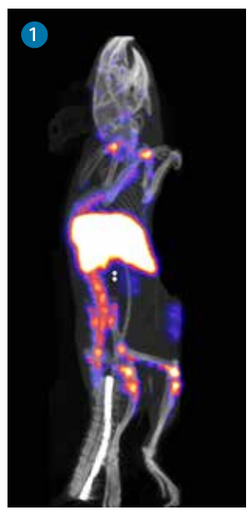
The nanoScan® PET subsystems are **capable of performing all PET-applications** at the highest level available on the market. Due to the ultra-fast electronics and finest crystal pixels in thick layers, the **widest dynamic range from 60 Bq to 80 MBq** is achieved. Combining this with the large axial and transaxial FOV of the PET ring, imaging of large or multiple animals simultaneously is possible.

UNCOMPROMISED APPLICATIONS WITH VERY LOW LEVEL OF RADIOACTIVITY

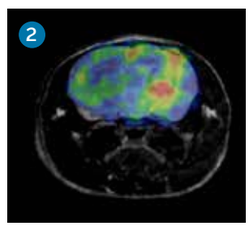
- Thick LSO crystals for **excellent sensitivity**
- **Short (3 ns) coincidence time window** necesary for improved signal to noise ratio
- Advanced corrections (random, scatter, LSO background, etc.) ensuring **quantification at low activity levels**
- **Best Minimal Detectable Activity:** 60 Bq (1.6 nCi)
- **Dedicated feature** of the iterative Tera-Tomo™ 3D PET reconstruction engine ensures precise quantification at very low levels of activity
- **Analytic reconstruction option (FBP)** with attenuation and scatter correction available for quantitative reconstruction of low activities close to regions with significantly higher activity
- Inherently **optimized for longitudinal studies** e.g. long-term cell tracking 1 and cardiac imaging 3



Cell tracking (^{89}Zr)

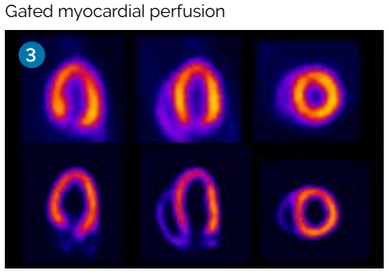


Glioma in mouse brain (FDG)



Stroke in rat brain (FDG)

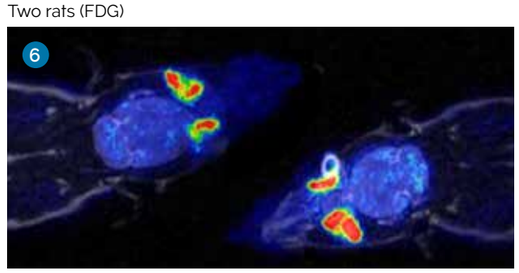
Gated myocardial perfusion



QUANTIFICATION ACCURACY

- The Tera-Tomo™ 3D PET reconstruction engine along with the most advanced detector calibration algorithms ensure a very high level of quantification accuracy through the entire dynamic range of the system. The quantification error of +/- 2% results in accurate and reproducible uptake values making your data more valuable.

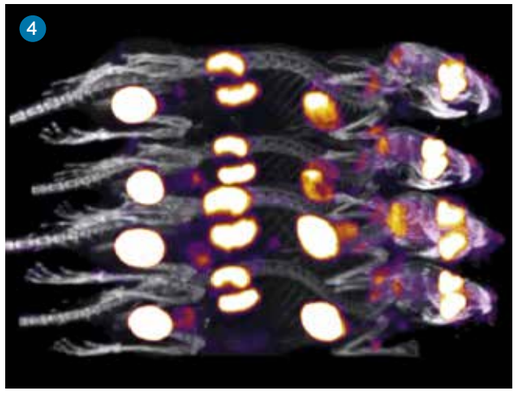
Two rats (FDG)



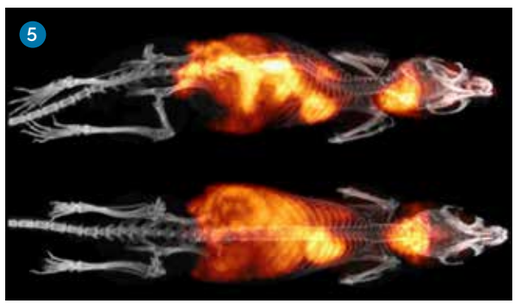
COPING WITH COUNT RATE: MASTERING STUDIES WITH HIGH DOSE

- Multichannel read-out electronics, ultra-fast data processing and advanced dead-time correction
- **Exceptional count rate performance** – peak Noise Equivalent Count Rate (NECR) for mouse is 1300 kcps @ 80 MBq
- **Fully quantitative** up to 80 MBq (2.16 mCi) and beyond
- Suitable for **dynamic imaging of up to 4 mice** 4 or **2 rats** 6 simultaneously
- Optimal for imaging of isotopes with **short half-life** (^{11}C, ^{13}N, ^{15}O, etc.) 5

Four mice (FDG)



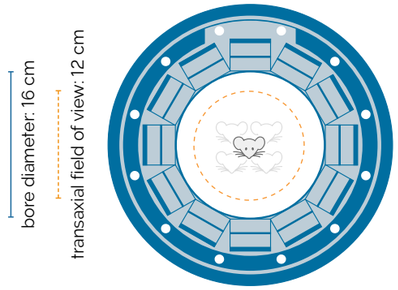
Two mice (11C-Choline)



Excellent image quality in the entire 12 cm TFOV

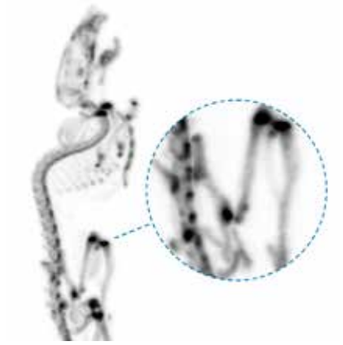
Largest transaxial field of view

- **Wide bore diameter of 16 cm** allowing free access to the animals
- **Large transaxial field of view of 12 cm**
- **Excellent homogeneity** over the entire field of view
- Suitable for various animal models **from tiny mouse** (25 g) **to large rabbits** (6.5 kg)
- Simultaneous **multiple animal imaging** (up to 4 mice or 2 rats) with individual physiological monitoring



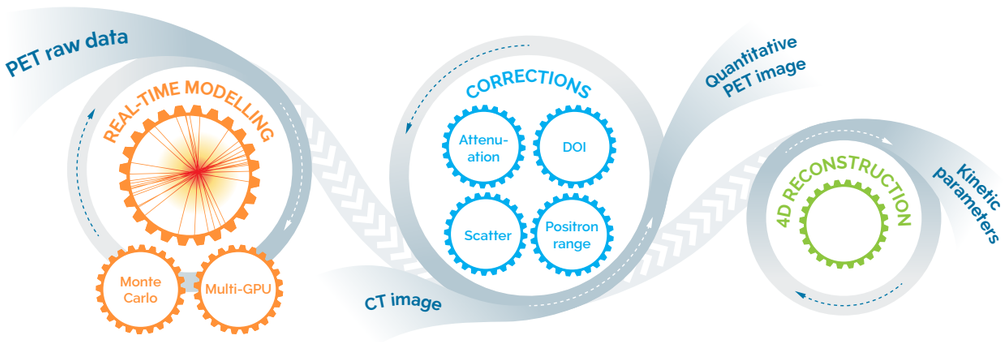
Resolving precise details with 700 µm spatial resolution

- **Finest** (1.12 mm×1.12 mm) lutetium oxyorthosilicate (LSO) crystal needles provide precise signal localization preserving spatial information in raw data
- Tera-Tomo™ 3D PET **iterative reconstruction with real-time Monte Carlo based physical modelling** unveiling the tiniest details on the image
- **Large ring diameter** and statistical depth of interaction compensation offer **homogeneous image quality** over the **entire field of view**



Tera-Tomo™ image reconstruction

Our proprietary iterative reconstruction engine, used in both clinical and preclinical systems ensures **quantitative results** with excellent resolution for **all PET isotopes**.

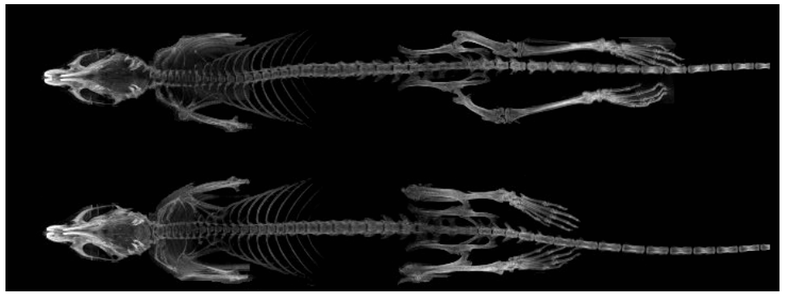


- **3D iterative** reconstruction applying deep **Monte Carlo based physical modelling** of particle-level interaction from positron emission to detection
- **Advanced corrections** for energy, time, dead-time, for random events and for **positron range**
- CT-based attenuation and scatter correction
- Automated workflow with **4D multiparametric PET reconstruction** for fast kinetic analysis of dynamic acquisitions

High power CT with large FOV and high resolution

The nanoScan CT system combines a powerful X-ray tube with variable geometrical magnification, therefore it covers all possible CT applications regardless whether they require high power, large field of view, or high spatial resolution.

The **real time image reconstruction** allows to minimize the study duration and to get the CT volume ready for attenuation and scatter correction of multimodality studies without additional waiting time. The possibility of scanning up to **four animals simultaneously** multiplies the throughput further. The system also covers wide range of standalone CT-applications from measuring **bone mineral density** in high resolution bone scans to **ECG** and **respiratory gated CT** studies. The **iterative image reconstruction** offers excellent low contrast imaging, but also a key to reduce the dose to the animal below 1mGy per scan.



Highest power with largest FOV

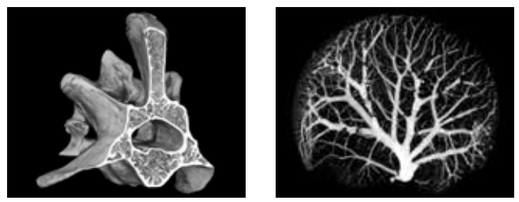
The high power **(80 W)** X-ray tube together with the largest field of view (**12 cm transaxial** and **45 cm helical** scan range) enables high-performance scanning of large animals: large rats or **rabbits** up to the weight of 6.5kg or multiple animals: **four mice** or **two rats** simultaneously. The **highest photon flux** also allows to reduce whole-body scan time without compromising the image quality.

Lowest dose preclinical CT

The high-power tube is equipped with a thick aluminium filter absorbing low energy X-rays that would create unnecessary dose to the animal. Adding iterative image reconstruction the Ultra-low dose CT protocol enables **whole-body mouse scans with <1mGy** radiation dose. Therefore, there is no need to eliminate CT based attenuation and scatter correction for any PET or SPECT scan.

High spatial resolution

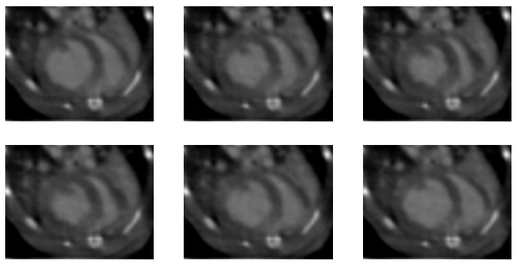
The system offers variable magnification (up to 7.6x) for high-resolution imaging even with **10 µm isotropic voxel size**. Low noise and excellent image quality are also ensured by **iterative image reconstruction**.



Mouse vertebra and liver (10 µm and 20 µm voxel size)

ECG and respiratory gating

Cardiac and respiratory gated CT studies are also available both for reducing motion artefacts and for analysis of cardiac and pulmonary function.

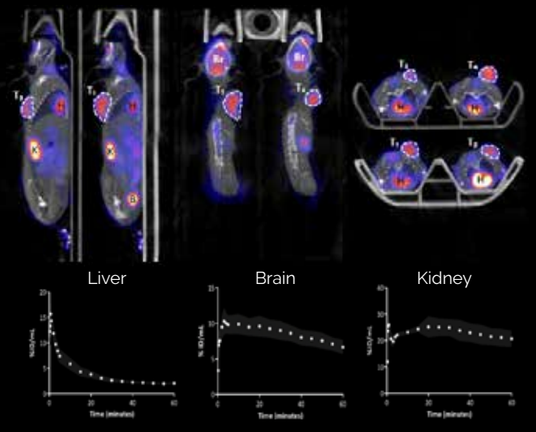


ECG gated mouse CT

PET/CT Applications

Simultaneous dynamic multiple animal imaging

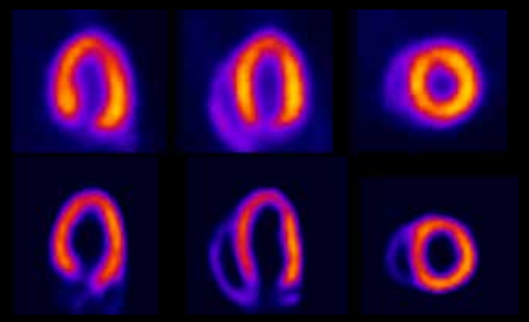
Simultaneous dynamic scan of 4 mice. Temperature control and physiological monitoring of all animals ensure quantitative readout of metabolic activity of organs.



ANIMAL: 4×20g mice
RADIOTRACER: 3.7 MBq (100 µCi) ^{18}F-FDG
ACQUISITION: dynamic PET
Greenwood et al *JNM* 2020, 61 (2) 292-297

Cardiac gated mouse and rat imaging

High resolution and advanced reconstruction enables high-quality cardiac gated PET imaging, where even the right ventricle of the mouse is visible.

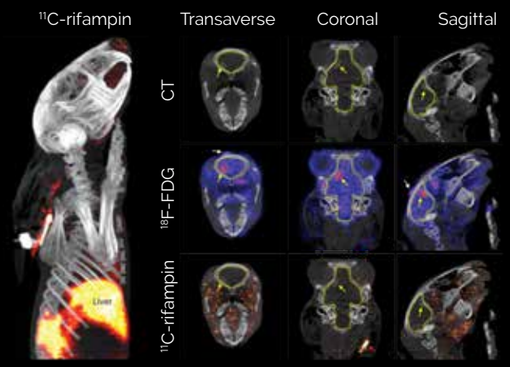


ANIMAL: 18 g mouse
RADIOTRACER: 13.3 MBq (360 µCi) ^{18}F-FDG
ACQUISITION: ECG-gated PET, 8 frames
ACQUISTION TIME: 90 minutes

ANIMAL: 220 g rat
RADIOTRACER: 30.8 MBq (830 µCi) ^{18}F-FDG
ACQUISITION: ECG-gated PET, 8 frames
ACQUISTION TIME: 60 minutes

Tuberculosis imaging in rabbit with ^{11}C-rifampin

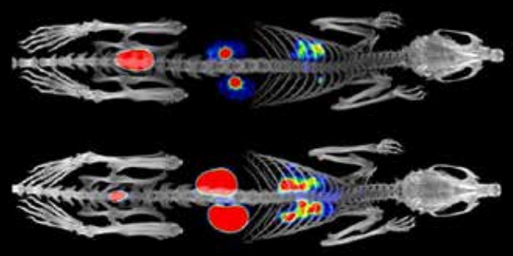
Dynamic and longitudinal ^{11}C-rifampin PET/CT imaging provided reliable data for optimized TBM treatments.



ANIMAL: New Zeeland White rabbit
RADIOTRACER: ~66 MBq (1.8 mCi) ^{11}C-rifampin, ~20 MBq (0.55 mCi) ^{18}F-FDG
ACQUISITION: dynamic PET 30 min
Tucker et al *Sci. Transl. Med.* 10, eaau0965 (2018)

^{68}Ga-Ornibactin for bacteria infection imaging

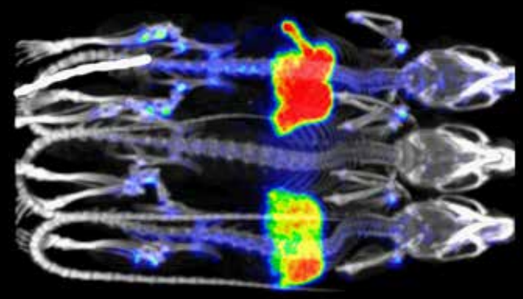
The system is able to handle the long positron range of ^{68}Ga and provide quantitative results showing, that ^{68}Ga-ORNB complex accumulates at the site of Burkholderia multivorans infection, including pneumonia, in two animal infection models.



ANIMAL: female 8- to 10-week-old Lewis rat, lung infection model
RADIOTRACER: 5 MBq (0.8 µCi) ^{68}Ga-ORNB
ACQUISITION: 2-FOV PET
Bendova et al *J. Med. Chem.* 2023, 66, 11, 7584–7593

In vivo cell tracking ^{89}Zr

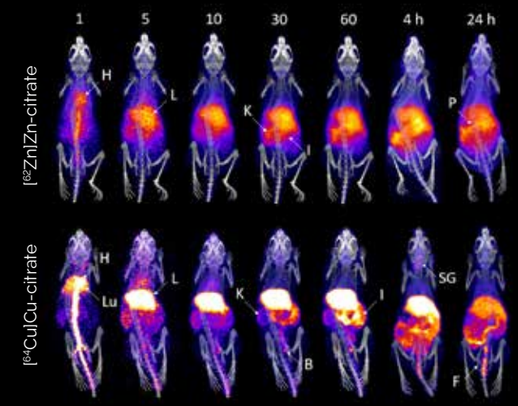
The system enables quantitative studies with extremely low activities like in case of longitudinal cell tracking studies. The image below shows the last data point of a study taken on 17th day post-injection.



ANIMAL: 3×20 g mice
RADIOTRACER: 30 kBq (0.8 µCi) ^{89}Zr labelled cells
ACQUISITION: static PET

Imaging zinc trafficking *in vivo* with ^{62}Zn

Whole-body biodistribution of ^{62}Zn-citrate was investigated *in vivo*, and then compared with ^{64}Cu-citrate as a control to distinguish the biodistribution of ^{62}Zn from that of its daughter ^{62}Cu, present at the time of injection.



ANIMAL: Female BALB/c (9-11 weeks)
RADIOTRACER: ~5 MBq (0.14mCi) ^{62}Zn-citrate and ^{64}Cu-citrate
ACQUISITION: dynamic PET 60 min, 4 h, and 24 h p.i.
Firth et al *Metallomics*, 14, 2022, mfac076

Whole-body angiography of rat's vasculature

Whole-body angiography of a large (500 g) rat's vasculature after contrast agent injection into the left carotid artery.

ANIMAL:
500 g Wistar rat
ENERGY:
50 kVp
TUBE POWER:
80 W
ACQUISITION TIME:
5 min

Complete PET/CT workflow

Perform routine scans with the clinical validated **Nucline™** acquisition software

Nucline™ acquisition software has been developed for **multimodal** medical imaging devices, and is used in **clinical and preclinical** systems as well. It provides the same easy-to-use, integrated framework and main features for all the different modalities **(PET, SPECT, CT and MRI)**. It integrates wide range of functionalities of acquisition, calibration, data management, reconstruction, and visualization. Nucline™ has been developed with focus on **clean and user-friendly interface,** while complying to **industry standards** (21 CFR p11, DICOM) and high level **cybersecurity** expectations.

1 PERSONALIZED ACCESS LEVELS

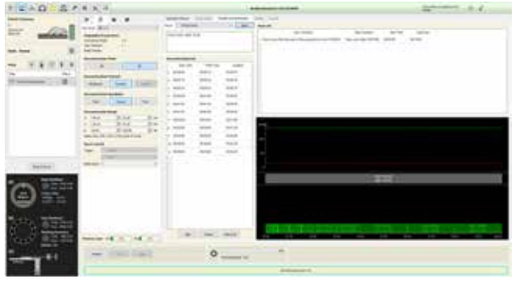
- **Routine:** A **couple of clicks** and the system is ready to run a **study-specific, optimized protocol. Only geometry** is to set: **error-free scanning guaranteed.**
- **Advanced:** Several acquisition and reconstruction parameters are editable **providing the chance to further optimize the protocols** for the study.
- **Research: Access for all system parameters** for researchers with significant experience

2 FOCUS ON QUALITY

- **Automatic**, quick **daily QC** protocols
- **Real-time diagnostic** – including energy and time spectra as well as total and random rate display – for verifying successful injection of radioactivity
- Logged diagnostic data

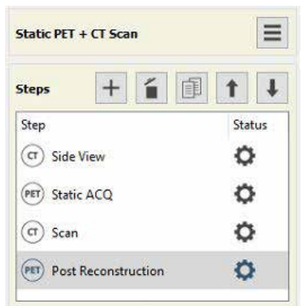
3 INTUITIVE GEOMETRIC AND DYNAMIC PLANNER

- **Designing scans graphically** based on CT scout
- **Start** PET and CT scanning **by 2 clicks** using the predefined protocols
- **Handle radiotracer** information easily, even during scanning to save time
- **Design dynamic frames** and even multi-FOV dynamic scans and **reconstructions graphically**
- **Copying FOV** from one modality to other
- **Easy-to-use image viewer** to quickly check the result image before next step



4 PREDEFINED, CONFIGURABLE PROTOCOLS

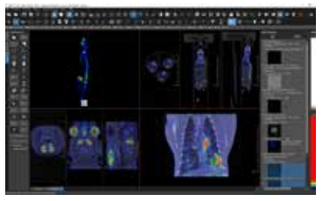
- Multimodality multi-step **pre-saved factory protocols** optimized for various applications
- Factory protocols can be copied, **edited, fine-tuned** by the User
- Application specific **User protocols** can be saved and **loaded easily** assuring **quick, reliable scanning**
- Protocol steps can run **automatically** one by one



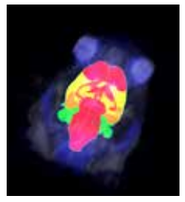
Analyze your quantitative data with the FDA approved **InterView™ FUSION** visualization and evaluation software

The FDA approved and clinically validated InterView™ FUSION multi-modal post-processing software is an essential part of system. It provides a wide range of functionalities to evaluate PET/SPECT/CT/MRI preclinical data for example:

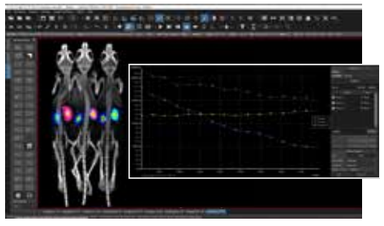
- **Automatic multiple animal image separator**
- **Brain atlas**
- Wide range of 2D and 3D image viewers and rendering for visualization including 3D MIP and 3D Volume Rendering
- 3D and 4D data fusion via all image viewers and visualization of them over time frames
- Large variety of ROI/VOI tools
- **Time activity Curves (TAC) of multiple ROIs/VOIs over 4D dynamic data** with multiple statistics (min, max, mean, stdev, sum, etc.)
- Automatic co-registration procedures (rigid, affine and non-linear)
- Advanced segmentation methods
- Wide range of data input/output/export capabilities including video formats



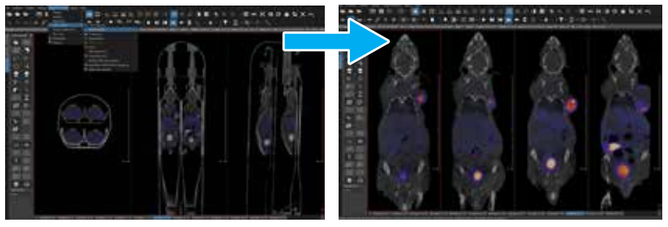
Various image viewer tools



Rat brain atlas



3D MIP viewer with VOIs and related TACs



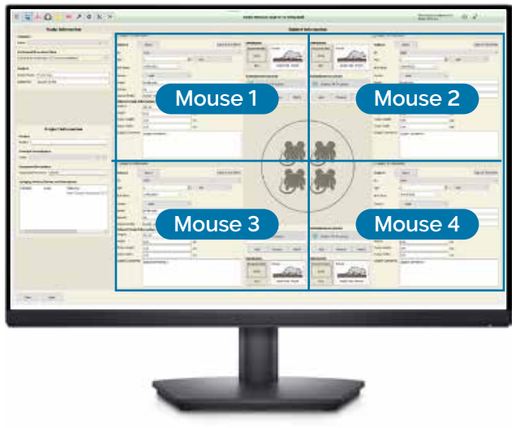
Automatic multiple animal image separator

Throughput quadrupled

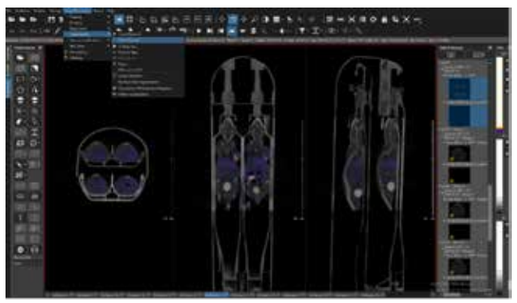
Fully automated workflow for multiple-animal imaging

With the fully automated complete multiple-animal workflow the improvement in throughput is not limited to acquisition but enables **significant improvement** in **reconstruction** and **image analysis time** as well. There is no need to any manual modifications in animal or dose data, the solution offered takes care of the whole process **automatically,** ensuring **quantitative SUV** data in the end.

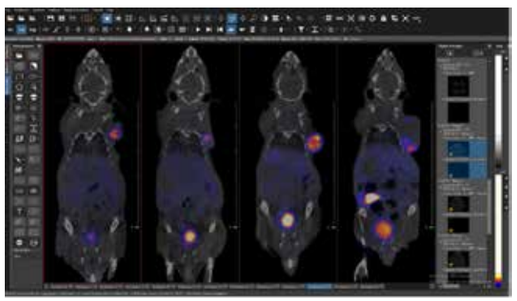
- **Record animal data** (animal ID, weight, injected activity, etc.) for all animals separately and store it in the raw acquisition file.
- **Acquisition** is as simple as a single animal scan - with **individual physiological monitoring** for all animals
- **Reconstruction:** The whole scanned volume can be reconstructed within a couple of minutes
- **Automatic erasing of the chamber** in the InterView™ FUSION software in one click of a button
- **Automatic separation** of animal images to individual DICOM sets
- Applying **dose and weight information** separately and save them to the DICOM header:



Quantitative SUV data for each animal automatically.



Automatic erasing of the chamber



Automatic separation

Four mice scanning without compromise

The **large bore size** (16 cm) and **transaxial field of view** (12 cm) of the nanoScan® PET/CT system enables scanning of **four mice, each up to 60 g** simultaneously. With the nanoScan® system there is no **need to squeeze** the animals in very small diameter containers that results in limitation in animal size and degradation in image quality due to possible spill over.

Scanning of four "normal-sized" mice

Flexible options for installation

The nanoScan® PET/CT system is designed to have **small footprint** and to be installed in any lab. At the same time dynamic PET-imaging capabilities are supported with all possible means i.e. free access to the animal in the PET-ring, minimal dead space and starting acquisition from the touchscreen.
As **X-ray safety** is an important topic for every imaging lab, the nanoScan® PET/CT fits all possible requirements. From closed box X-ray option to open CT system in separate acquisition room various possible configuration are offered.

nanoScan® PET/CT and SPECT/CT reference installation of two systems in one small laboratory

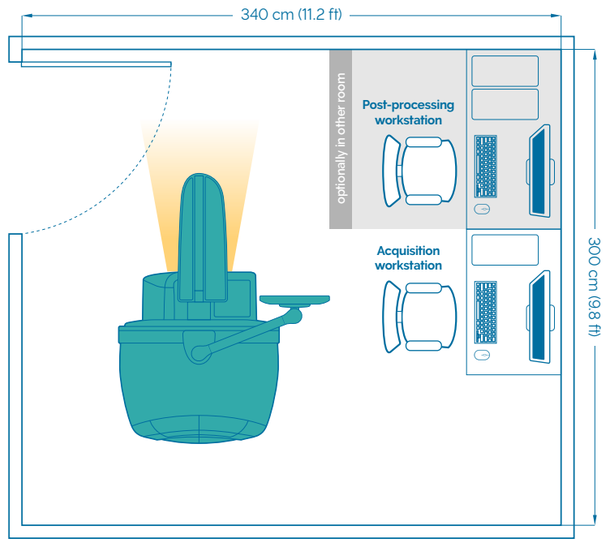
CLOSED BOX CT OPTION

Available option ensuring zero radiation emission in the imaging room.

Closed box CT option installed

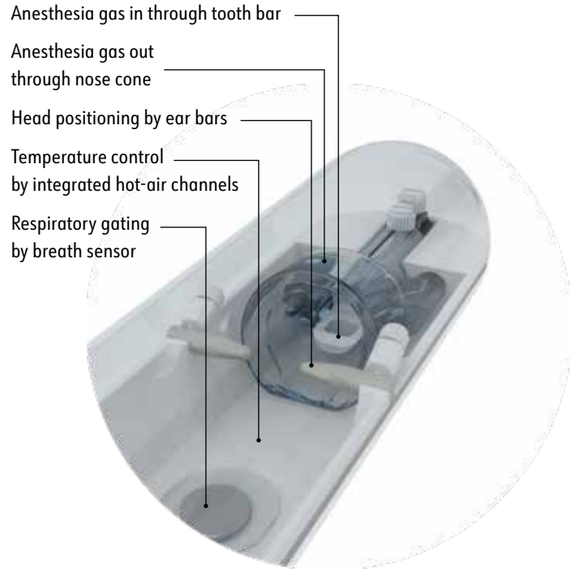
Minimal installation requirements

- **Light-weighted systems with small footprint:** 650 kg, 1760×1050 mm (L×W)
- No need for control or technical room. All workstations can be placed next to the system
- Post-processing workstation can be next to the acquisition workstation or at the researcher's room
- Acquisition can be started from touchscreen
- As the nanoScan® PET/CT is a closed and properly shielded system (compliant with the regulations of IEC/EN 60601-1-3 12.4 and 12.5), it is not necessary for the operator to leave to camera room even in standard configuration.

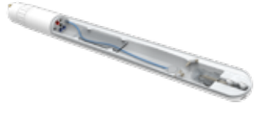


Animal handling

MultiCell™ imaging chambers



Mouse L (Standard)



Inner space: 141×31 mm
Outer dimension: 466×40 mm
Up to 80 g
Also available in BSL3 version

Rat L

Inner space: 249×60 mm
Outer dimension: 580×70 mm
Up to 600 g

Rat Dual (Side-by-Side)

Inner space: 2×55×400 mm
Outer dimension: 118×579 mm
Up to 2×300 g

Rat Dual (Head-to-Head)

Inner space: 240×60 mm
Outer dimension: 590×70 mm
Up to 2×200 g

Mouse Triple

Inner space: 144×26 mm
Outer dimension: 488×70 mm
Up to 3×30 g

Mouse BSL-3

Inner space: 141×31 mm
Outer dimension: 578×60 mm
Up to 80 g

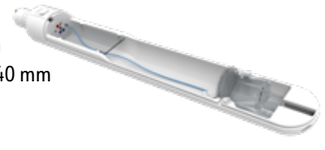
Mouse Quadruple

Inner space: 4×30×194 mm
Outer dimensions: 85×524 mm
Up to 4×60 g

Rat XXL

Inner space: 102×510 mm
Outer dimensions: 110×650 mm
Up to 1.5 kg

Marmoset



Inner space: 65×440 mm
Outer dimensions: 70×540 mm
Up to 600 g

Rabbit

Inner space: 150×600 mm
Outer dimensions: 160×760 mm
Up to 6.5 kg

Monitoring and gating

- ECG monitoring and triggering
- Respiration monitoring and triggering
- Temperature monitoring and control module
- Accessible from touchscreen and workstation

Respiration and body temperature monitoring even for four animals

PrepaCell™

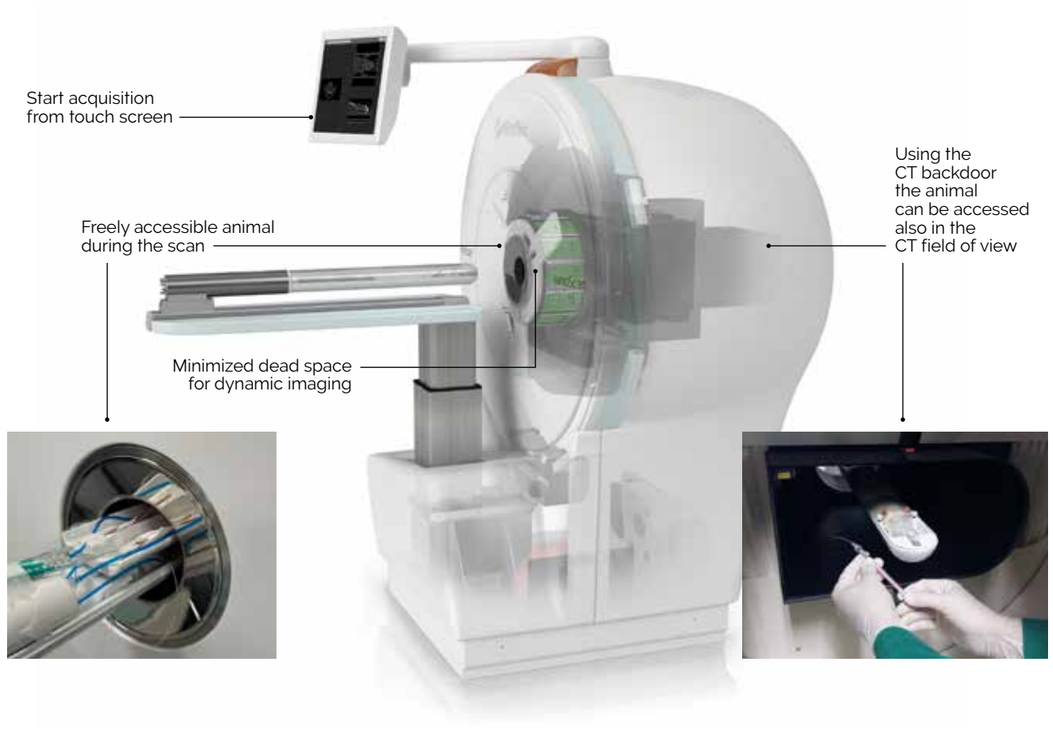
Supporting complete animal preparation before the scan, setting of:

- Anaesthesia
- Heating
- Vital function monitoring

Eases workflow and increases throughput

Free access to the animal

For dynamic PET-studies it is **crucial to have free access to the animal** and to avoid the use of long catheters. The nanoScan® PET/CT system is designed to master these needs and to offer the best possible solution with clearly visible and accessible animal in the PET field of view.



nanoScan® MRI 3T/7T

High-end MRI with the most robust cryogen-free magnet on the market

MRI

100% CRYOGEN-FREE • ROBUST MAGNET

- **3T** and **7T** field strength
- **100% Cryogen-free** magnet
  - » No liquid helium or nitrogen
  - » Closed loop – no need to top-up helium
- Wide-range of **RF Coils and Sequences**
- Compact design:
  - » Small footprint
  - » Marginal fringe field
  - » **480 / 970 kg** (3T / 7T)
  - » **1050 / 2140 lbs** (3T / 7T)
- Powerful Gradient: **(up to 1050 mT/m)** for DWI application
- Low-vibration, rear mounted PulseTube cryocooler for artefact free DWI-EPI
- SmartMagnet™
  - » **Eco-friendly idle mode**
  - » **Active quench protection**
- Upgrade possibility with 2-types of completely integrated PET systems

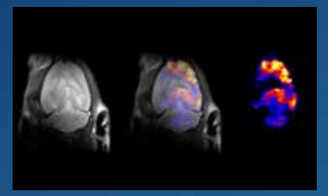
nanoScan® PET/MRI 3T and 7T

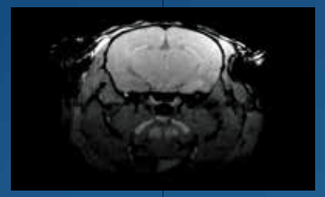
Full-scale, quantitative PET combined with a robust, cryogen-free MRI

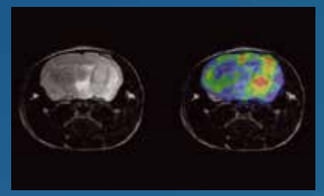
SPECT

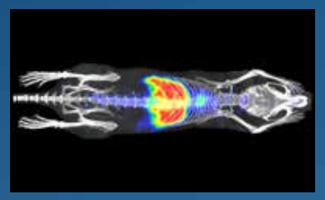
HIGH SENSITIVITY • HIGH RESOLUTION • OUTSTANDING THROUGHPUT AT THE SAME TIME

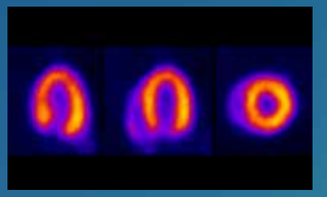
- High resolution **(0.3 mm *in vivo*)** and high sensitivity **13 000 cps/MBq**
- Largest field of view for large and multiple-animal imaging
- High-throughput
- Largest installation base **150+**
- Highest **flexibility:**
  - » Wide isotope energy range, single or multiple: **20 keV – 1 MeV**
  - » Various applications – **optimized multi-pinhole collimators** (e.g. MDP bonescan, dynamic, cardiac gated etc.)
  - » Animal models from **tiny mouse up to large rabbit** (6.5 kg)
  - » Different imaging schemes: helical, circular, full-stationary, 2D
  - » **Parallel-hole collimators** for imaging large animals
  - » List-mode acquisition

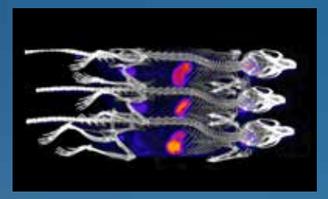


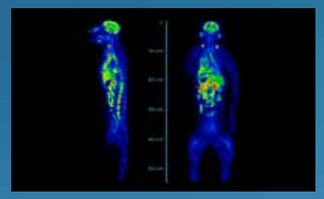


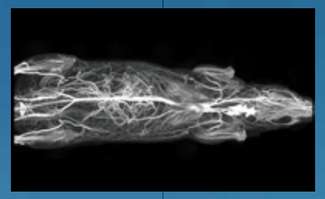


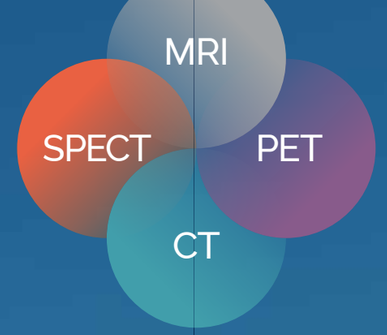












nanoScan® SPECT/CT

Versatile SPECT/CT with absolute quantification and full-stationary dynamic imaging

nanoScan® SPECT/CT/PET

Versatile SPECT with Real dynamic PET with absolute quantification

CT

HIGH POWER • HIGH RESOLUTION • LARGE FIELD OF VIEW

- High-resolution **(30 µm)**
  - – Small voxel size **(10 µm)**
- Up to **x7.6 zoom**
- Variable transaxial field of view: **2–12 cm**
- Highest power: **80 W** X-ray tube for
  - » Large animals
  - » Better image quality
  - » Fast scanning
  - » *Ex vivo* samples
- Ultra-low dose protocol (**<1 mGy** for whole-body mouse)
- Real-time FBP and iterative reconstruction
- Respiration and cardiac gated reconstruction

PET

BEST COUNT RATE PERFORMANCE • HIGHEST RESOLUTION WITH FREE ACCESS TO THE ANIMALS

- Highest resolution **(< 0.7 mm)**
- Largest transaxial field of view **(12 cm)**
- Largest axial field of view (up to **15 cm**)
- Highest count rate performance **(**up to **1300 kcps @ 80 MBq)** supporting quantitative imaging in
  - » **Radiotracer development**
  - » Imaging of **short half-life isotopes** (e. g. ^{11}C, ^{13}N, ^{15}O)
  - » **Multiple-animal** imaging
- **Free access** to the animal supporting dynamic imaging
- **Best NEMA sensitivity** up to **10.5%** (250-750 keV) and best Minimal Detectable Activity (MDA)
- Excellent quantification
- Largest installation base: **150+**

nanoScan® PET/CT

Real dynamic PET-system designed for quantitative studies

MultiScan™ LFER 150 PET/CT

The ultimate tool for PET imaging in primates and medium sized animals

Specifications | nanoScan® PET/CT

PET

Gantry opening
16 cm

Transaxial FOV
12 cm

Axial FOV
15 cm

Spatial resolution with Tera-Tomo™ (3D OSEM)
0.7 mm

Spatial Resolution with FBP (NEMA)
1.25 mm

Sensitivity
10.5% (250–750 keV)

Noise Equivalent Count Rate for mouse (NEMA)
1300 kcps @ 80 MBq / 2.16 mCi

Animal models
mouse, rat, marmoset, guinea pig, rabbit

Multiple animal imaging
up to 4×60 g mice and 2×500 g rats

Detector crystal
LSO (1.12×1.12×13 mm

CT

Gantry opening
16 cm

Transaxial FOV
12 cm

Axial FOV
10 cm

X-ray power
up to 80 W

Spatial resolution
30 µm at 10 µm voxel size

Ultra low-dose protocol
down to 1 mGy for whole-body mouse

Animal models
Mouse, rat, marmoset, guinea pig, rabbit

Multiple animal imaging
up to 4×60 g mice and 2×500 g rats

Image reconstruction
modified Feldkamp-type for real-time reconstruction, iterative for low-dose and low-noise applications

300+ preclinical systems in

33 countries

nanoScan® **PET/CT** | nanoScan® **SPECT/CT** | nanoScan® **MRI 3T/7T** | nanoScan® **PET/MRI 3T and 7T** | nanoScan® **SPECT/CT/PET** | MultiScan™ **LFER150 PET/CT**

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