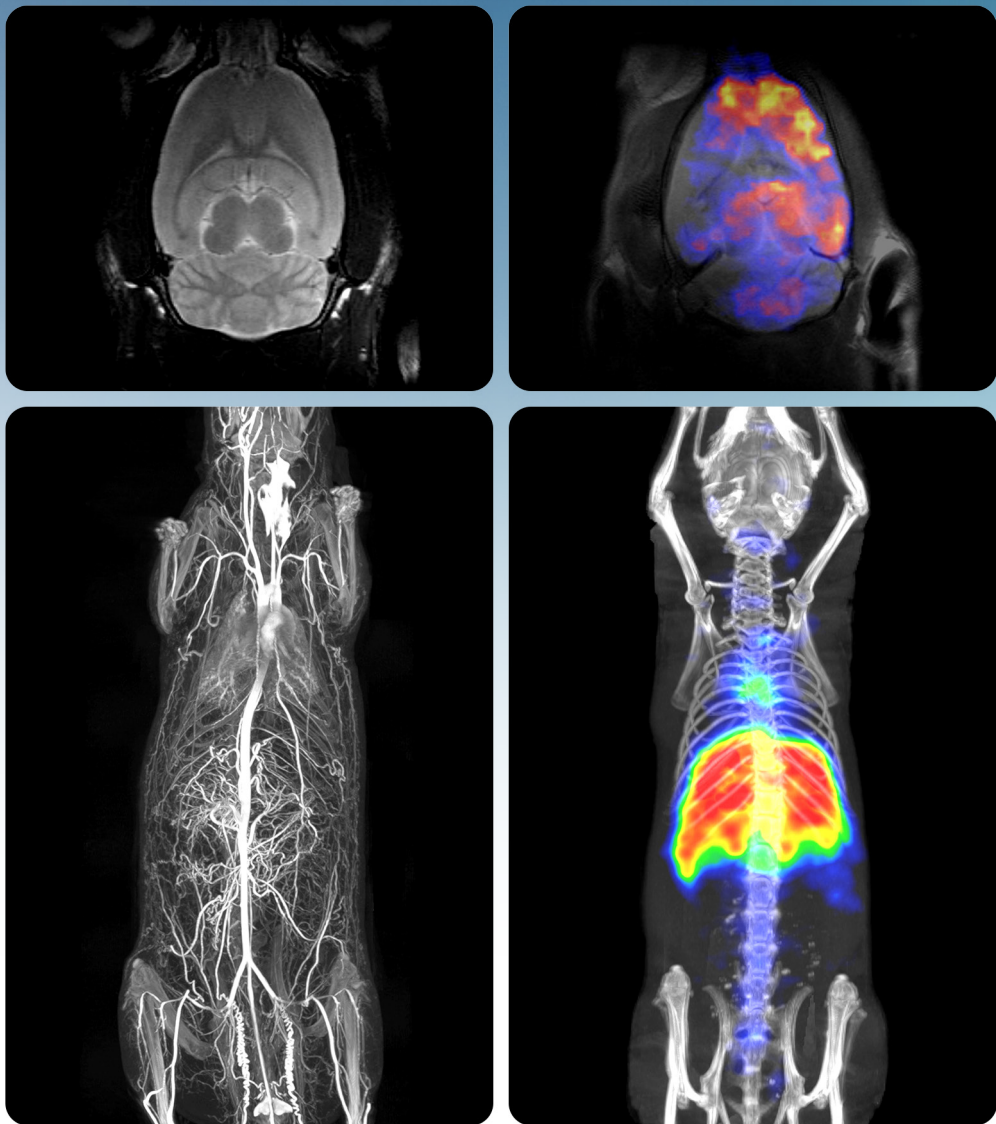


# nanoScan<sup>®</sup> Family

The next generation four modality preclinical imaging platform  
PET/CT, PET/MRI 3T/7T, MRI 3T/7T, SPECT/CT, SPECT/CT/PET



## SPECT

- High throughput versatile imaging system
- Highest sensitivity
- 300 µm spatial resolution
- Full stationary, list mode data acquisition for dynamic imaging with < 3 sec time resolution
- > 97% absolute quantification accuracy
- High flexibility
  - Parallel hole collimators for imaging large animals: rabbit, minipig, monkey
  - Helical, circular and full stationary acquisition schemes
  - Tailor-made multiple pinhole collimators for special applications
  - Capable for multi-isotope imaging (20 - 600 keV)



nanoScan® SPECT/CT



nanoScan® SPECT/CT/PET



nanoScan® MRI 3T/7T

## MRI

- Compact, reliable design
- 7T or 3T field strength
- 100% Cryogen-free magnet
- Powerful gradients (up to 1000mT/m)
- Various, state-of-the-art RF coils



nanoScan® PET/MRI 3T/7T

## PET

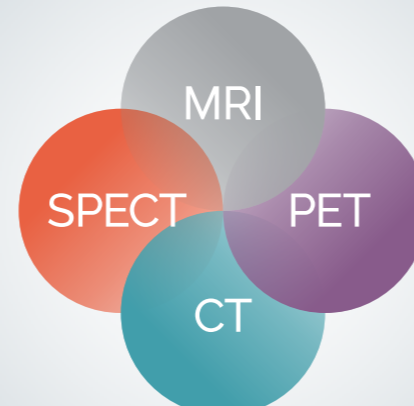
- Real dynamic system designed for quantitative studies (>97% accuracy)
- Highest resolution ≤ 0.7 mm
- Highest count rate performance (850 kcps @ 60 MBq) for quantitative imaging of high radioactivity concentration
  - in radiotracer development
  - in imaging with tracers with short half-life (e.g. <sup>11</sup>C, <sup>13</sup>N, <sup>15</sup>O etc.)
  - simultaneous imaging of multiple animals
- Large transaxial FOV (12 cm)
- Free access to the animal
- Matured design with proven performance (>120 installed systems world-wide)



nanoScan® PET/CT



MultiScan™ LFER PET/CT



## CT

- 80 W/1mA X-ray tube power
- x7,6 zoom
- < 10 µm isotropic voxel size
- 2-12 cm variable TFOV
- Ultra-low dose protocol with 1mGy

1. MRI 7T of mouse brain using flexible surface coil, 3D GRE sequence with 60µm in-plane resolution  
 2. PET/MRI 3T imaging of glioma in mouse brain, Radiotracer: 3.2 MBq (86 µCi) <sup>18</sup>F-DG  
 3. ECG-gated PET of an 18g mouse, Radiotracer: 13.3 MBq (360 µCi) <sup>18</sup>F-DG

4. PET/CT of a 30g mouse, Radiotracer: 30kBq (0.8µCi) <sup>89</sup>Zr-oxine labelled cells  
 5. CT of a 500g rat with an iodine based contrast agent  
 6. SPECT/CT of 3x 20g mice, Radiotracer: 16.6 - 18.7 MBq (450-500 µCi) <sup>99m</sup>Tc - pertechnetate

7. SPECT/CT of a 18g mouse, Radiotracer: 2.5 MBq (68 µCi) <sup>131</sup>I - albumin  
 8. PET/MRI 3T of stroke in rat brain using 2 channel Phased Array coil, Radiotracer: 23 MBq (621 µCi) <sup>18</sup>F-DG

## Multicell™ imaging chambers

### Mouse standard

Inner space: 36 x 290 mm  
Outer dimensions: 40 x 460 mm  
Up to 80 g



### Mouse BSL3

Inner space: 36 x 290 mm  
Outer dimensions: 60 x 479 mm  
Up to 80 g



### Three-Mouse

Inner space: 3 x 24 x 220 mm  
Outer dimensions: 70 x 500 mm  
Up to 3 x 30 g



### Four-Mouse

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



### Rat standard

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



### Rat - XXL

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



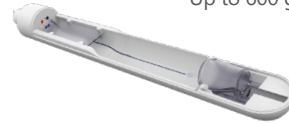
### Rabbit

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

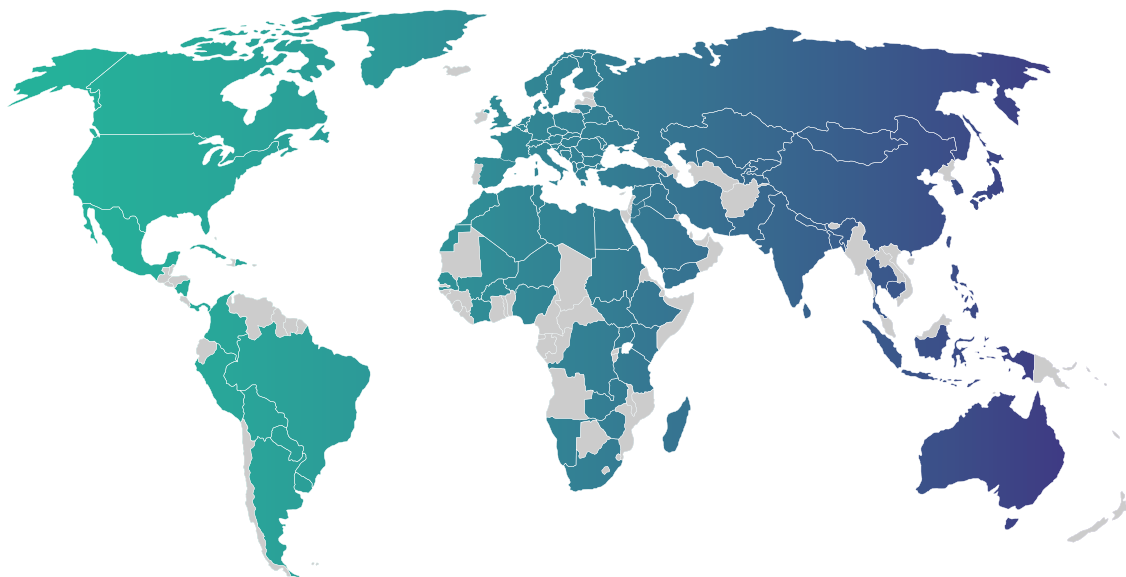


### Marmoset

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



More than 1300+ clinical and 270+ preclinical Mediso manufactured single and multimodality imaging systems were distributed in 100 countries of the world



### Conformance Statement

Quality management system operated by Mediso Medical Imaging Systems complies with Council Directive 93/42/EEC Annex II. The multimodality molecular imaging system was approved by a Notified Body.

Product design, development, production and services comply with EN ISO 13485 and EN ISO 14971. Medical device design and safety testing has been performed in accordance with EN IEC 60601-1 and EN IEC 60601-1-2 standards.

Safety labels are attached to appropriate places on equipment and appear in all operation manuals.

The supplied software complies with DICOM standard.

The technical information provided here is not a detailed specification.

For details and up to date information please contact your local distributor or Mediso Medical Imaging Systems.



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