



A desktop preclinical **3D SPECT** platform for
fast *in vivo* imaging of diagnostic and
therapeutic radiopharmaceuticals

 **eye**TM



From fast planar imaging to dynamic **3D SPECT**

The **y-eye™** system supports tomographic **3D SPECT** imaging, enabling enhanced spatial assessment while preserving its compact footprint and simplicity.

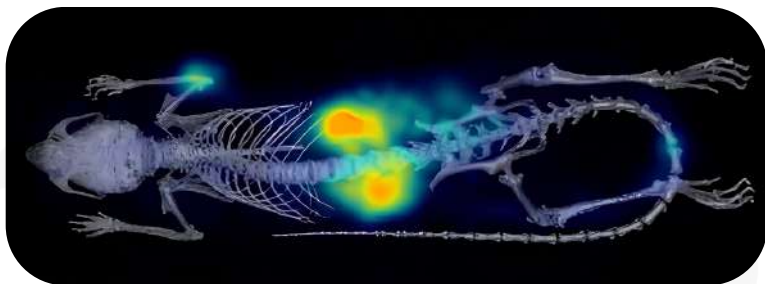


Key capabilities

- **3D SPECT** for whole-body spatial and longitudinal assessment
- **4D dynamic SPECT** for kinetic analysis
- **Fast planar imaging** for whole-body imaging, down to 1 sec frames
- Optimised for **alpha-emitting** radiopharmaceuticals



In-111



3D SPECT imaging at activity levels below 1 MBq

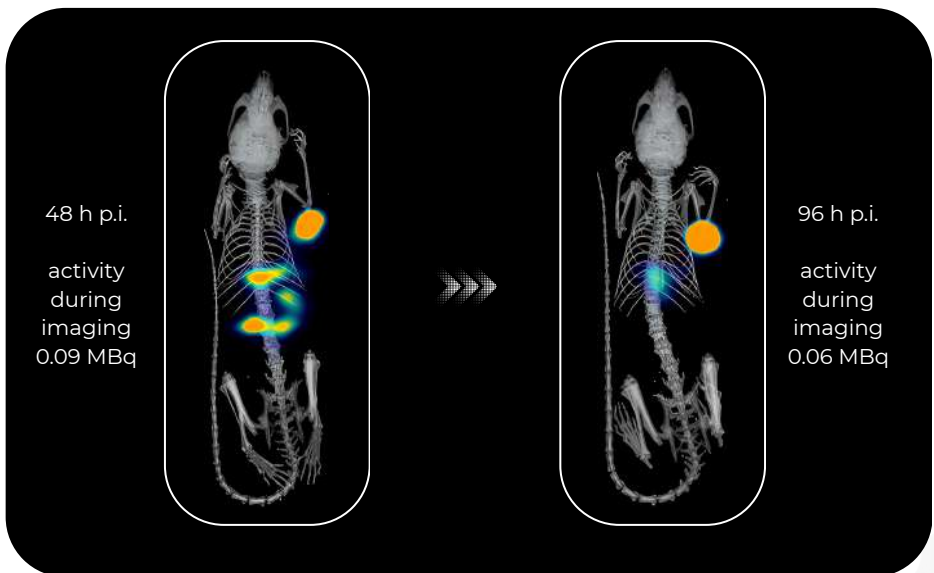
Image info: 72 h post injection – 30 min scan
activity during imaging 0.25 MBq

Longitudinal 3D SPECT imaging of ^{225}Ac radiopharmaceuticals

Whole-body 3D SPECT imaging enables **longitudinal** assessment of ^{225}Ac -Trastuzumab distribution across multiple post-injection time points.



Ac-225



All-peaks 3D SPECT images from a longitudinal series

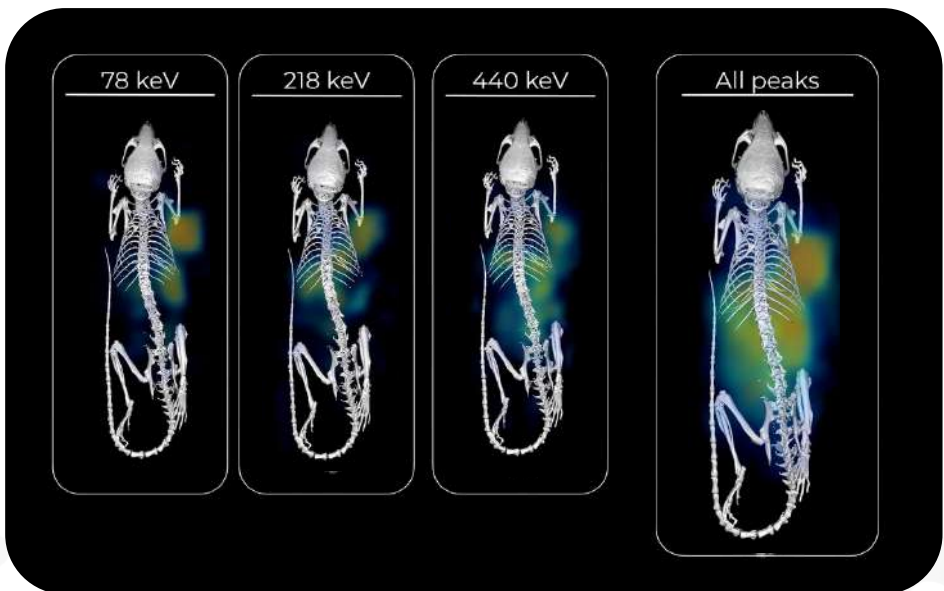
Image info: 30 min scans – injected activity 0.17 MBq

3D SPECT multi-window imaging of ^{225}Ac radiopharmaceuticals

Tomographic 3D SPECT imaging of ^{225}Ac -Trastuzumab enables energy-resolved assessment of radiopharmaceutical and daughter radionuclide distributions *in vivo*.



Ac-225



^{225}Ac -Trastuzumab images across selected decay-chain energy windows

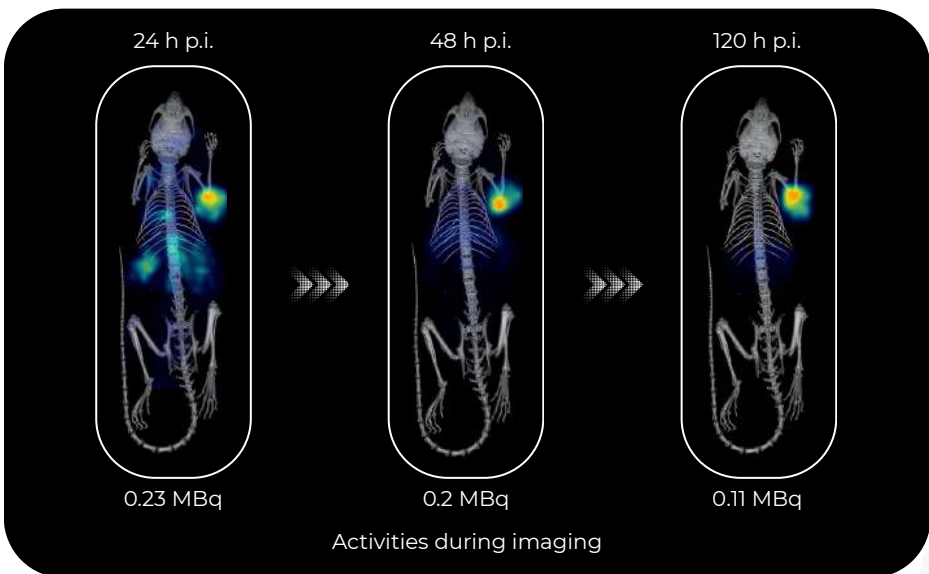
Image info: 72 h post injection – 30 min scan – injected activity 0.17 MBq

Longitudinal 3D SPECT imaging of ^{177}Lu radiopharmaceuticals

Whole-body 3D SPECT imaging enables **longitudinal** assessment of ^{177}Lu -Trastuzumab distribution up to 5 days post injection.



Lu-177



3D SPECT images from a longitudinal series
Image info: 30 min scans – injected activity 0.4 MBq

Dynamic 4D SPECT for time-resolved imaging

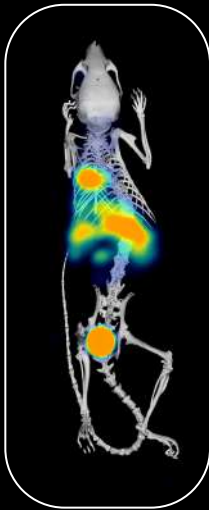
The γ -eye™ enables **dynamic 4D SPECT** imaging to track radiotracer distribution over time, providing early insight into uptake and clearance kinetics.



Lu-177

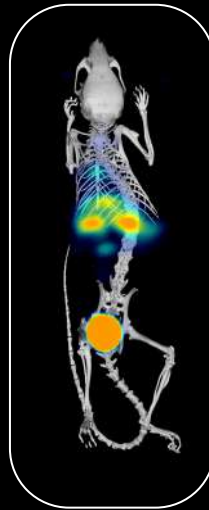
Early time point

6 min p.i.



Late time point

50 min p.i.



Selected frames from a dynamic 4D SPECT acquisition of ^{177}Lu -Trastuzumab

Image info: 3-53 min post injection – 5 min frames
activity during imaging 40.2 MBq

High-throughput configuration for multi-animal imaging

y-eye™ is also available in a **High Throughput** configuration, designed for efficient planar imaging of larger study cohorts and increased experimental throughput.

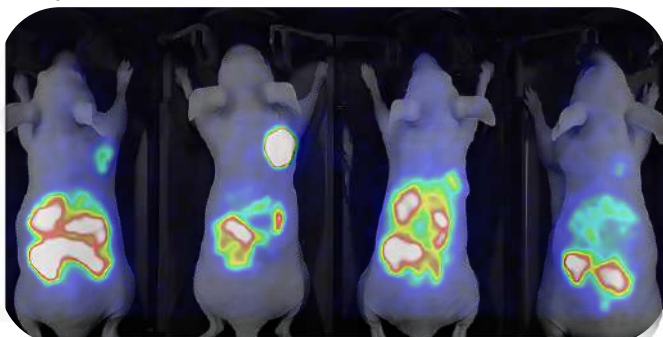


High-Throughput configuration

- **100 × 200 mm** field of view
- **Up to 4 mice** simultaneously or 1 rat
- More than **110 mouse scans** per day
- Dedicated to planar imaging workflows



In-111



Simultaneous imaging of 4 mice with ¹¹¹In-DOTATATE

Image info: 3 h post injection – 10 min scan
injected activity 5.5 MBq per mouse



BIOEMTECH's eyes™ systems are designed around real preclinical imaging needs to support more efficient research workflows

SCAN ME

