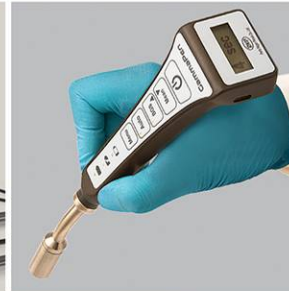Central Office:

NO.8, Hamedan Alley, North
Kargar St. Tehran - Iran
Po.Box: 14185-615
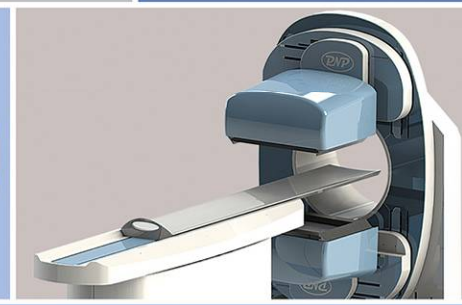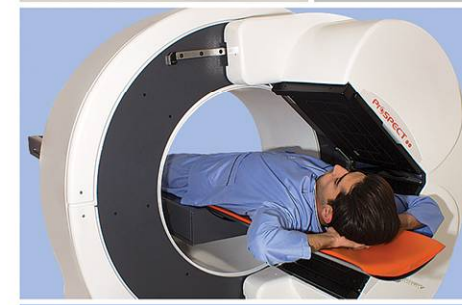
Tel : +98 21 - 66 58 11 59
+98 21 - 66 58 09 59
+98 21 - 40 66 03 58
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CERTIFIED
ISO 13485

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ISO 9001

PNP Parto Negar Persia Co.

PNP

Parto Negar Persia Co.

Pioneer in Healthcare Technology

Welcome to PNP

PNP Co. was established in 2010 based on our experience in the field of Nuclear Medicine. We had short time to prepare but have developed wide range of NM products in limited time. Our Knowledge-based company rely on professional, young and talented staff.
We have a firm belief in achievement of goals through the enterprise spirit and will not lose original intension. Base on our energy and knowledge we are promising our commitment to be the world's best medical devices with the best quality.

Prof. Mohammad Reza Ay
CEO, Parto Negar Persia Co.

The company is a leader in designing and developing different NM systems including:
- Small Animal SPECT (HiReSPECT)
- Cardiac SPECT (RoboSPECT)
- Cardiac SPECT (ProSPECT I, ProSPECT II)
- Hand Held Gamma Camera (SURGEOSIGHT)
- Gamma Probe (SURGEOGUIDE II)
- GammaPen
- Urea Breath Test (UBT)
- Animal PET Imaging System (Xtrim)
- Brain PET (Coming Soon)
- General SPECT (Coming Soon)

And also the company provides a wide range of services including:
- Consulting and Site Planning in NM/PET Department
- Consulting and Site Planning in Tracer Production Department
- Radiation Shielding Calculations

We aim to bring differentiated, high-quality and needed medical imaging products to as many people as possible, with our global businesses, scientific and technical know-how and talented people.
Our great achievements and reputation are mainly due to enjoying good management, capable staff, latest technology and maximum use of the great potentials existing in our country.

Products Certificates

ProSPECT

IEC 60601-1:2012
IEC 60601-1-2:2014
IEC 62304:200
NEMA NU1:2007

Whole Body SPECT Imaging

IEC 60601-1:2012
IEC 60601-1-2:2014
IEC 62304:200
NEMA NU1:2007

ProSPECT II

IEC 60601-1:2012
IEC 60601-1-2:2014
IEC 62304:200
NEMA NU1:2007

SURGEOSIGHT

ISO 9001:2008
ISO 13485:2007
IEC 60601-1:2005

Products Certificates

SURGEOGUIDE II

ISO 9001:2008
ISO 13485:2003
IEC 60601-1:2012
IEC 60601-1-2:20014
NEMA NU3

GammaPen

ISO 9001:2008
ISO 13485:2003
IEC 60601-1:2012
IEC 60601-1-2:20014
NEMA NU3

HeliGuide

ISO 9001:2008
ISO 13485:2003
IEC 61010:2010
IEC 61326:2012

Xtrim PET

IEC61326:2012
IEC60601-1 2012
IEC61000-3-3:2013
IEC61000-3-2:2014
ISO 13485
ISO 9001
CISPR11:2015
NEMA NU4:2008

HiReSPECT

ISO 9001:2008
ISO 13485:2003

ProSPECT

ProSPECT system has an optimized design in nuclear cardiology. The system gives you all information needed for confident diagnosis and myocardium imaging.

The gantry and table of the system are designed with a variety of scans in mind and in a comfort manner specially for patients with claustrophobia disorder.

The ProSPECT system equipped with two detectors with small FOV to minimize extra cardiac activity.

ProSPECT

Designed with a variety of patients in mind

ProSPECT system can scan a variety of patients with all sizes because of a 76 cm bore of the gantry.
The system provides a wide range of SPECT scans such as supine, prone, dextrocardia, 180 degrees and 360 degrees arcs.

Conformance Statement

- Product design, development, production and services comply with ISO 13485, ISO 9001, IEC 60601-1, IEC 60601-1-2, IEC 62304 and NEMA NU1.
- Safety labels are attached to appropriate places on equipments and appeared in all operation manuals.
- The supplied software complies with DICOM standard.
- The technical information provided here is not a detailed specification.

- Optimized field of view for cardiac imaging
- Supine and prone imaging
- Variety in patient size and weight
- List mode gated SPECT acquisition
- Motion artifact detection and reduction
- Advance Cedars-Sinai software for quantification
- Minimal dead zone in detectors
- User-friendly acquisition station
- Easy-to-use hand controller
- Portable acquisition console
- Appealing colors

IEC 60601-1:2012
IEC 60601-1-2:2014
IEC 62304:200
NEMA NU1:2007

Handling patients of all sizes
Design for easy access of patient with any size and weight (150 kg, 210 cm)

Providing a wide variety of SPECT scans
Possibility of SPECT scans in different modes including supine, prone, dextrocardia, 180 and 360 degrees arcs

Portable acquisition console
User-Friendly acquisition software with predefined acquisition protocols

Optimal detector design for cardiology
Dual-detectors with fixed 90° angle and minimum dead zone

Hand controller
Easy to control system operations
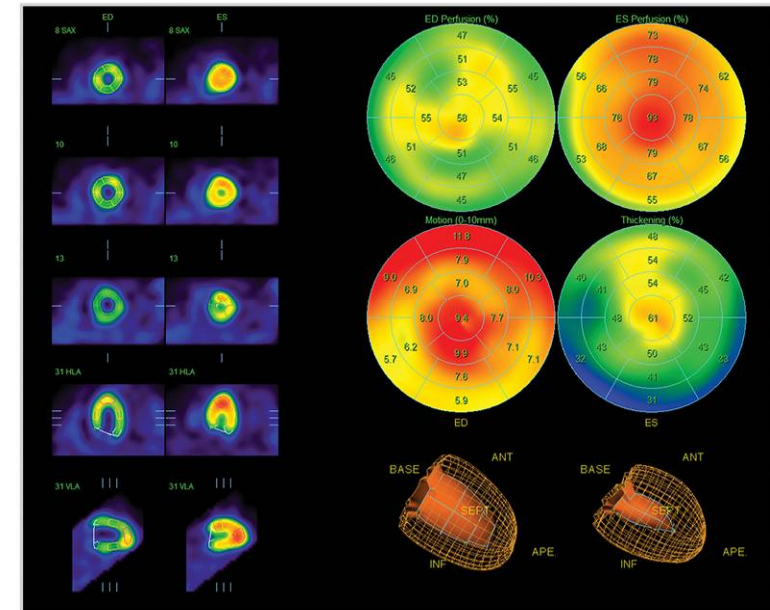
Designed with patient comfort in mind
Patient-friendly design specially patients with claustrophobia disorders

Light-weight collimators
Easy to change collimators manually
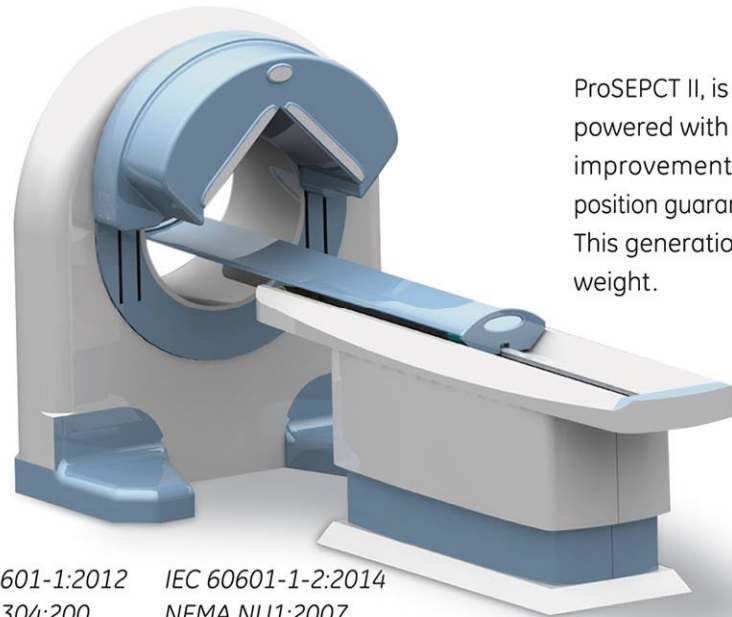
Optimal Field of View
Optimized FOV to minimize inappropriate activity uptake of other organs

ProSPECT II

ProSEPCT II, is our third generation, dedicated cardiac SPECT system powered with durable, stroung and heavy duty gantry. It combines improvements in durability and patient comfort. The lowest bed position guarantees easy access even for patients with limited mobility. This generation can scan patients without any limitation in size and weight.

ProSEPCT II, as dedicated dual head cardiac SPECT system can be easily upgraded to whole body general SPECT only with changing the detector configuration and size.
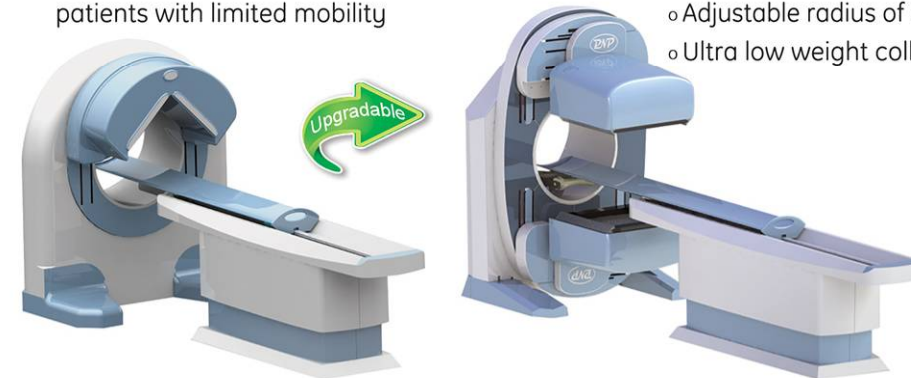
IEC 60601-1:2012   *IEC 60601-1-2:2014*
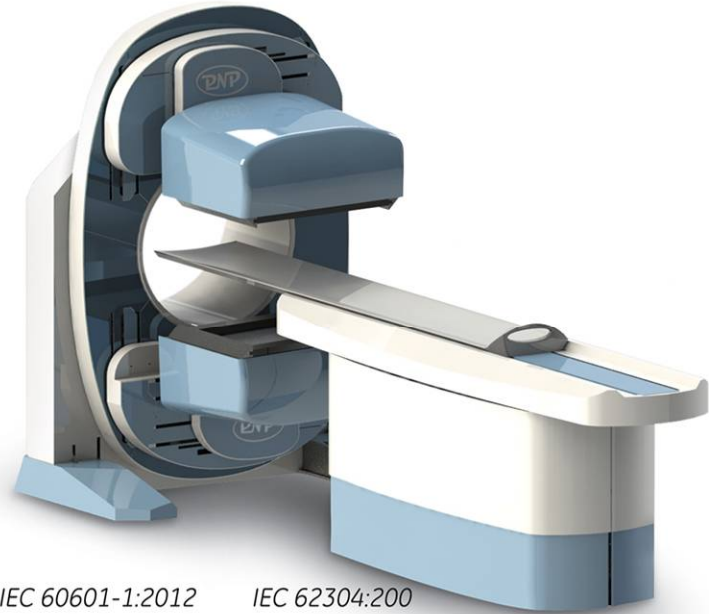*IEC 62304:200*   *NEMA NU1:2007*

ProSPECT II

ProSEPCT II, main specifications:

- **Patient handling**
  - No limitation on patient weight and size
  - Designed for patient comfort and increased versatility
  - Low table height to ride patient specially patients with limited mobility

- **Gantry**
  - Easy to install
  - Low attenuation patient bed for improved image quality
  - Durable mechanical parts with low maintenance costs
  - Optimal detector design for cardiology with minimum dead zone
  - Adjustable radius of rotation (ROR) to minimize distance to patients
  - Ultra low weight collimator

- **ECG**
  - A wireless ECG system using dry-contact electrodes
  - Optional list-mode gated SPECT acquisition
  - User selectable stop criteria (time, counts or beats)

Whole Body SPECT Imaging
Dual Head Variable Angle General SPECT System

The device provides whole body imaging with high accuracy which can increase your vision and help enhance diagnostic abilities in a reliable way.

Innovative detector design and advanced scanning capabilities can help to improve image quality. In addition, high image quality is achieved with reduced dose. Device geometry and modern design cause high efficiency. Ergonomic design and a wide gantry bore combined with modern robotics for quick setup and considerably reduced acquisition times and improve the reputation of your scan.

Other advantages such as easy to use hand controller, user friendly acquisition station and real-time access make it more practical nuclear imaging system.

The product also includes excellent support with local service.

IEC 60601-1:2012   IEC 62304:200
IEC 60601-1-2:2014   NEMA NU1:2007

Whole Body SPECT Imaging
Dual Head Variable Angle General SPECT System

- Increased efficiency: Short time scans with low noise and high sensitivity, simple and automated acquisition and camera setup can help improve productivity and make possible few minutes imaging time

- Outstanding image quality: dedicated and Innovative detector design with square high performance PMT and advanced scanning capabilities can help to improve image quality the system offers

- Dose management: High detector performance permits to decrease patient injected dose

- Patient comfort: Ergonomic gantry design and a wide gantry bore combine with heavy duty mechanic make the system very stable

- Excellent support: Maximum uptime and usability with expert engineering team

- Easy to use hand controller: very simple manual control

- User friendly acquisition station: very simple setup for acquisition

SURGEOSIGHT

ISO 9001:2008
ISO 13485:2007
IEC 60601-1:2005
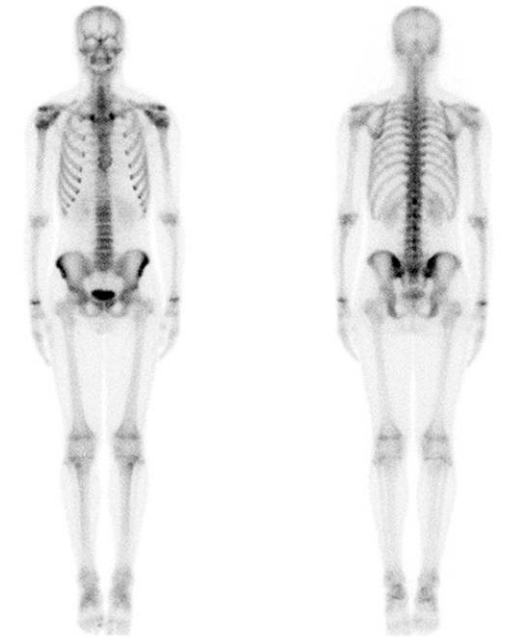
SURGEOSIGHT is a portable mini camera developed for pre-surgical lymphoscintigraphy, thyroid scan and intra-operative localizing sentinel lymph nodes. Lymphoscintigraphy and sentinel lymph node biopsy is an area of increasing utility in determining which lymphnode basins serve the diseased tissue.

The presence or absence of regional lymph node involvement often determines the staging and treatment of many malignant tumors. In some clear words, it can play the role of a "Surgeon's sight" in an operation room.

Specifications:

- Number of pixels: 36 × 36
- Pixels size: 1.2 mm × 1.2 mm
- PSPMT: H8500
- Field of view: 42 mm × 42 mm
- Spatial resolution @ collimator surface: <2.5 mm FWHM
- Sensitivity @ collimator surface: 320 cpm/µCi for TC-99m
- Energy range: 60-300 keV
- Weight: 1.2 kg

Applications:

- Pre-operative Lymphoscintigraphy
- Intra-Operative Sentinel Node Detection
- Scintimammography
- Radio-Guided Surgery
- Thyroid Scanning
- Small Organs Imaging

NEMA NU3
ISO 9001:2008   ISO 13485:2003
IEC 60601-1:2012   IEC 60601-1-2:20014

Due to high prevalence of breast cancer in females, there are annually lots of breast surgical operations for removal of malignant tumors.

However, failure in discovery and removal of cancerous lymph nodes (sentinel nodes) will lead to metastasis of cancer in the patient. Currently, there are various methods with different degrees of accuracy to detect sentinel nodes. Amongst all of them, still the most common and most favorite device for surgeons is gamma probe providing an easy-to-use small hand-held tool with the capability of detection and localization of sentinel lymph nodes not only in breast cancer but also for some masculine types of cancers where detection of sentinel nodes is mandatory. We developed such a gamma probe system: SURGEOGUIDE II.

Specifications:

- Sensitivity: ~2k cps/MBq @ 3 cm
- Shielding Efficiency: 99.6% for Tc-99m
- Energy Resolution: <11% FWHM for Tc-99m
- Three Types of Probes: Large Tip, Small Tip, Endoscopic
- Probe Length (Large & Small): 21 cm
- Tip Diameter: 16 mm (Large), 11 mm (Small), 10 mm (Endoscopic)
- Stainless Steel Body, Tungsten Collimator
- Angular Resolution: 30˚, 45˚, 95˚ (optional)
- Local Resolution: <40 mm FWHM at 5 cm distance (For Large Probe)
- User-Friendly Console
- Bright Display
- FM/Beep Sound
- Two Probes Simultaneously
- Light Weight Console
- Battery-Powered (Optional)

Stage IV Adult
Hodgkin Lymphoma

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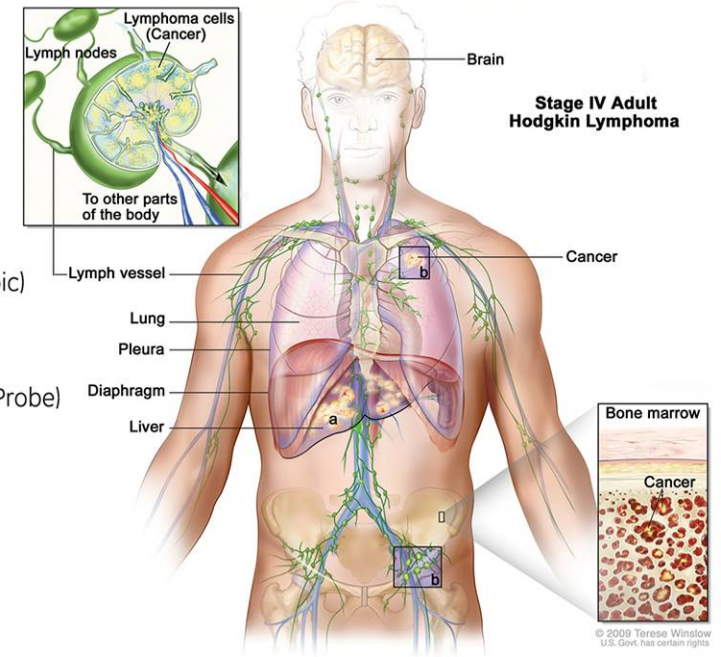
GammaPen

All in one version of gamma probe is a fully mobile system which is an ingenious precision instrument that works without any annoying cables.

This version is a combination of console and probe with a display so it does not need separated console, but it supports bluetooth connection, so user has freedom to use its main display or connect it to a mobile or tablet for multiple displaying.

NEMA NU3
ISO 9001:2008   ISO 13485:2003
IEC 60601-1:2012   IEC 60601-1-2:20014

GammaPen

GammaPen Specifications:

- Length: 22cm
- Two type of tips: small and large
- Tip diameter: 14 mm (Large), 11 mm (Small)
- Tungsten Collimator
- Crystal: CsI (Tl)
- Weight: 200 gr
- No disturbing cables
- Rechargable battery
- Bluetooth connection support
- User - Friendly
- Digital display
- Sound modulated with count rate

ISO 9001:2008   ISO 13485:2003
IEC 61010:2010   IEC 61326:2012

Helicobacter pylori is extremely common in humans, infecting around 50% of the world's population. It is recognized as the main etiological factor for chronic gastritis, peptic ulcer comma and also gastric cancer. Much suffering and even ulcer related deaths can be easily prevented through accurate diagnosis and appropriate treatment with antibiotics.

HeliGuide is a ^{14}C-Urea Breath Test System perfectly suited for primary diagnosis and for post treatment follow-up of Helicobacter pylori infection.

It is a reliable, safe, and cost-effective near-patient testing system consisting of three components: Capsule, BreathCard and HeliGuide Analyzer.

Advantages of HeliGuide system:

- Convenience – Easy to use, near patient testing no need to send sample for analysis
- Comfort – Painless, non-invasive gastroscopic tubing
- Speed – Samples are ready for analysis in only 10 minutes with test result available in 5 minutes

Specifications:

- Bright LCD display
- User-friendly console
- Firm and portable console with comfortable handle design
- Heavy duty packaging
- Weight: 4Kg
- Console dimension: 15×15.5×21 cm^3

Swallow the capsule
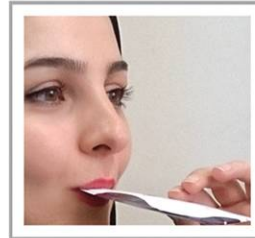
Aftera 10 minutes waiting
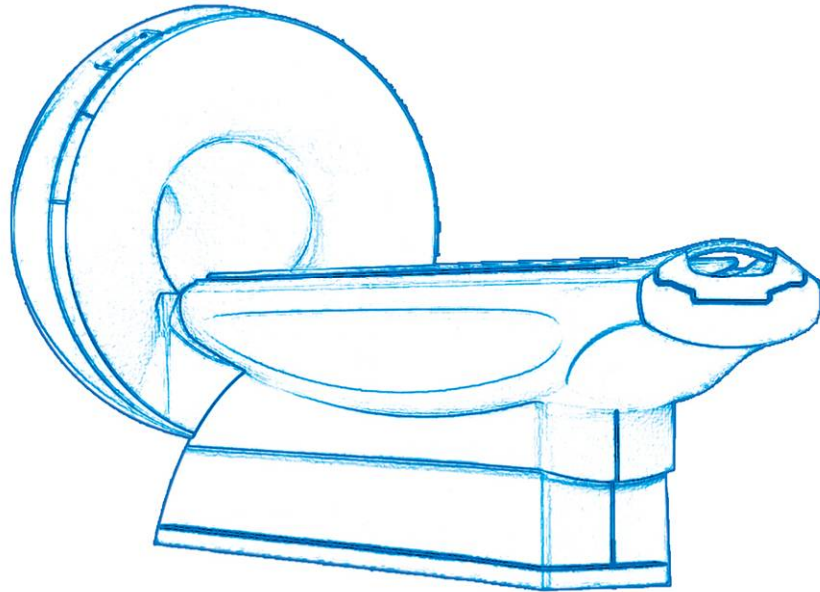

Insert Breathcard into HeliGuide analyzer

Result is available in a few minutes

Dedicated Brain PET
The First Ultra High Resolution Human Brain PET Scanner

PNP's dedicated Brain PET scanner based on SiPM technology provide superior image quality in neurology imaging.

The system reflects the amount of brain activity in the various regions of the brain and allows to depicting brain metabolism.

The system allowed making reliable quantitative measurements of radiotracers in the brain.

The system offers image quality with ultra high resolution and high contrast delectability. It coherently combines technologies foundational to greater performance through powerful software and hardware upgrades.

Dedicated Brain PET
The First Ultra High Resolution Human Brain PET Scanner

Advantages of PNP's dedicated high performance Brain PET:

- Optimized field of view for brain imaging
- Scalable field of view
- High Sensitivity
- Ultra high resolution
- Low noise and high contrast electronic
- Equipped with SiPM technology
- LYSO crystal for fast timing
- User friendly acquisition station
- Advanced software for quantification
- Enhanced patient comfort
- Advanced Accessories
- Productivity
- Low dose imaging
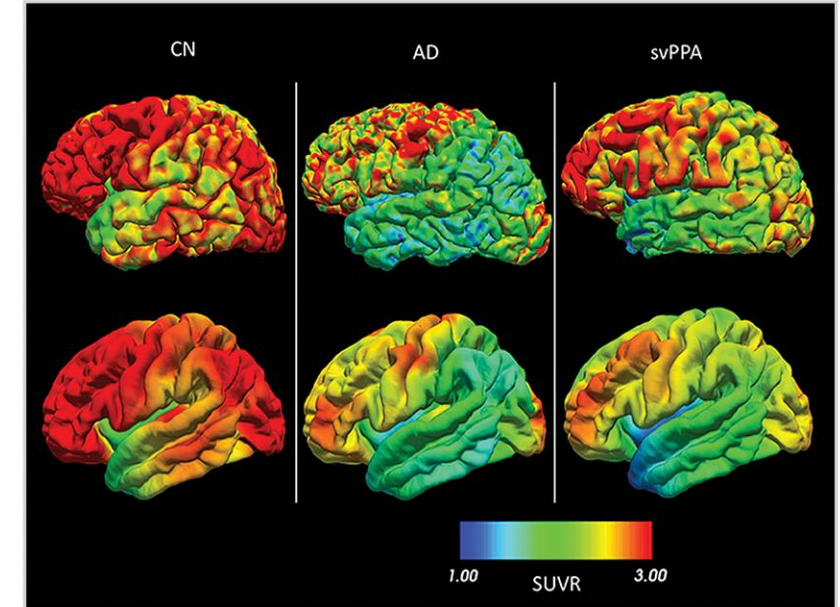
Xtrim PET

Over the past two decades, growing interest in using animal models of human disease has led to great advances in translational sciences. In line with this trend, non-invasive preclinical PET imaging systems are well-known for their superior capabilities in adopting molecular and cellular researches.

PNP preclinical solutions are removing the limits on driving medical research from the laboratory to the clinic. Xtrim provides the high performance and versatility available to address your preclinical imaging research needs. From basic science and disease progression, to drug discovery and development, Xtrim offers an unrivaled solution for optimizing your research outcomes.

Xtrim PET

Software Package

XT-vision is an exclusively developed software for Xtrim-PET imaging system with a user-friendly GUI that covers all calibration, reconstruction and correction requirements.
Data collected by the PET detector are stored and processed using proprietary custom designed circuit and application specific FPGA chip.
The data stream is transmitted to the image reconstruction engines. This high performance system enables you to simultaneously acquire and reconstruct your PET study data.

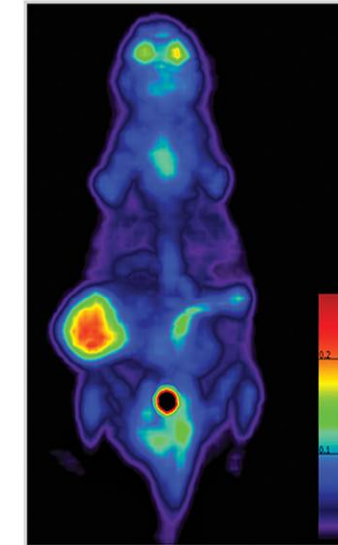|	
IEC61326:2012	ISO 13485
IEC60601-1 2012	ISO 9001
IEC61000-3-3:2013	CISPR11:2015
IEC61000-3-2:2014	NEMA NU4:2008

Mice with Melanoma Tumor   Bone Scan

Preclinical Core Facility of Tehran University of Medical science

HiReSPECT

High Resolution Animal SPECT Imaging System

HiReSPECT provides the highest performance and versatility available to address your preclinical imaging research needs from academic and translational research, to drug discovery and development.

The HiReSPECT is a Dual Head Small Animal SPECT imaging system that provides in vivo high resolution three-dimensional (3D) images of physiological functions in small laboratory animals.

Application:

Small animal imaging is an emerging field which has an impact on various biomedical research areas such as neurology, oncology, cardiology, immunology and infection biology.

The pharmaceutical industries and research centers will profit from SPECT system as they accelerate drug and biomarker development by yielding more reliable in vivo results and cost effective study design.

HiReSPECT

High Resolution Animal SPECT Imaging System

The HiReSPECT system uses a newly developed accelerated iterative reconstruction algorithm with adjustable percentage of resolution recovery using accurate modeling of collimator detector response.
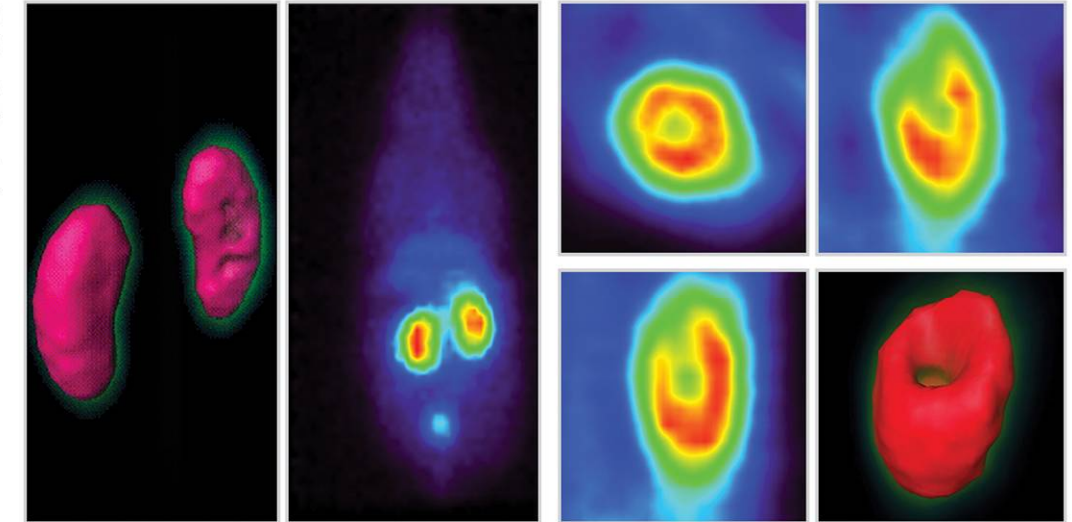
SPECT scan of Kidney with 99mTc-DMSA   Cardiac SPECT scan with 99mTc-MIBI

Preclinical Core Facility of Tehran University of Medical science

ISO 9001:2008
ISO 13485:2003