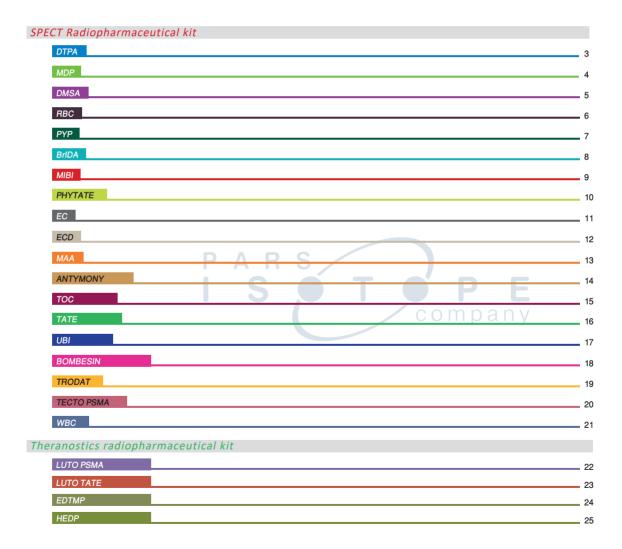


A cold kit (radiopharmaceutical kit) is a product which is usually used after labeling with radioisotopes for diagnostic, therapeutic, or both (theranostics) purposes. A radiopharmaceutical kit is actually used to prepare a radiopharmaceutical and including one or more vials consists of a vial containing non-radionuclide chemical components, usually in the form of a sterilized product ready to add the appropriate radioisotope to be converted to the radiopharmaceutical. Parsisotope is one of the major manufacturers of radiopharmaceutical kits which produces various diagnostic and therapeutic kits and its main products are divided into two categories in this catalog: diagnostic/SPECT (for labelling with Tc-99m) and theranostics (for labelling with Lu-177, Re-188).

Variety, extent and quality are the main features o f our products.



PARS DTPA

Application

Stability

KIT FOR PREPARATION OF PENTETATE (99mTc)

Single-Use/Multi-dose intravenous

Code: 01 Max Activity: 7400 MBg (200 mCi)

5 vials/ box

DTPA (Diethylenetriamine pentaacetate) 20mg/vial Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, sodium chloride, ascorbic acid

• Measurement of glomerular filtration rate (GFR) in renal scintigraphy

- Brain scanning
- · Lung ventilation imaging
- · Study of gastro-esophageal reflux and gastric emptying

6 hours after completion of radiolabeling procedure in below 25 $^{\circ}\text{C}$ condition

Shelf-life: 12 Months from the manufacture date
Storage: At 2-8 °C and protect from sunlight



For intravenous use:

The suggested dose range of ^{99m}Tc-Pentetate injection in the average ADULT patient (70 kg.) for:

- Measurement of glomerular filtration rate from plasma is 1.8-3.7 MBq (0.05-0.1 mCi).
- Measurement of glomerular filtration rate using gamma camera combined with sequential dynamic renal scanning is 37-370 MBq (1-10 mCi). Sequential scanning should begin immediately after injection. Optimal static imaging time is 1-hour post injection.
- Brain scanning is 185-740 MBg (5-20 mCi).

For cerebral examinations, static images are obtained 1 hour and, if necessary, several hours after injection. Sequential dynamic scanning should begin immediately after injection.

For inhalation:

The suggested dose range of 99mTc-Pentetate injection for



Lung ventilation imaging is 500-1000 MBq (13.5-27 mCi) and in nebuliser 50-100 MBq (1.35-2.7 mCi) in lung

For oral use:

The suggested dose range of ^{99m}Tc-Pentetate injection for Study of gastro-esophageal reflux and gastric emptying is 10-20 MBq (0.27-0.54 mCi). Dynamic recording should be performed during the first minutes (up to 120 minutes for gastroduodenal transit).

KIT FOR PREPARATION OF MEDRONATE (99mTc)







Single-Use/Multi-dose intravenous

Code: 02 Max Activity: 18500 MBq (500 mCi)

5 vials/box

MDP (Methylenediphosphonic acid) 5 mg/vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, sodium chloride, ascorbic acid

 Diagnostic and study of primary cancers or metastatic bone lesions and other bone diseases such as Paget, osteomyelitis, and fractures

6 hours after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date
Storage: At 2-8 °C and protect from sunlight



The suggested dose range of ^{99m}Tc-Medronate injection in the average ADULT patient (70 kg.) is 370-740 MBq (10-20 mCi) given intravenously. Imaging is optimal at 1 to 4 hours post Injection.



KIT FOR PREPARATION OF SUCCIMER (99mTc)

PARS DMSA

Single-Use/Multi-dose intravenous

Code: 05 Max Activity: 5550 MBq (150 mCi)

5 vials/ box

DMSA (Dimercaptosuccinic acid) 1.2mg/vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, Myo-inositol, ascorbic acid

Stability

Application

• Static imaging of kidneys

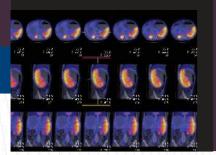
6 hours after completion of radiolabeling procedure in below 25 $^{\circ}\text{C}$ condition

Shelf-life: 12 Months from the manufacture date
Storage: At 2-8 °C and protect from sunlight



The suggested dose range of ^{99m}Tc-Succimer injection in the average ADULT patient (70 kg.) is 70 MBq (1.9 mCi). Scintigraphic examinations should not be carried out until at least 1 hour after application; waiting 3 hours is preferable. In the case of very poor renal function, waiting periods up to 6 hours should be observed. The patient must be well hydrated.





PARS RBC

• SPECT Radiopharmaceutical kit

KIT FOR PREPARATION OF RED BLOOD CELL (99mTc)

Single-Use/Multi-dose intravenous

 Code:
 06

 Max Activity:
 3700 MBq (100 mCi)

 3 vials/ box

- · 1 Colorless vial (lyophilized powder)
- 1 Colorless vial (ACD solution)
- 1 Brown color vial (Sodium Hypochlorite)
 Stannous Chloride, Dihydrate 0.105 mg /vial
 Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, sodium citrate,

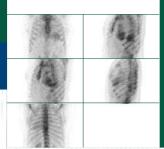
GI bleeding, blood pool imaging

^{99m}Tc-labeled red blood cells should be injected within 30 minutes of preparation or as soon as possible there after and has to be stored at room temperature (15-25 °C) during this time.

Shelf-life: 12 Months from the manufacture date Storage: At 2-8 °C and protect from sunlight



The suggested dose range of technetium ^{99m}Tc-labeled red blood cells injection in the average ADULT patient (70 kg.) is 370-740 MBq (10-20 mCi).



PARS PYP

KIT FOR PREPARATION OF PYROPHOSPHATE (99mTc)

Single-Use/Multi-dose intravenous

Code: 09

Max Activity: 3700 MBq (100 mCi)

5 vials/ box

Sodium pyrophosphate decahydrate 14.0 mg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under

vacuum

Excipients: Stannous chloride dehydrate, ascorbic acid

Application

Heart function

- · Blood flow through the organs and vessels
- · Hidden abdomen or bowel bleeding
- Blood volume
- Spleen

Stability

6 hours after completion of radiolabeling procedure in below 25 $^{\circ}\text{C}$ condition

Shelf-life: 12 Months from the manufacture date Storage: At 2-8 °C and protect from sunlight

The suggested dose range of ^{99m}Tc- Pyrophosphate injection in the average ADULT patient (70 kg.) for:

- Bone Imaging is 185-555 MBq (5-15 mCi).
- Cardiac Imaging is 370-555 MBq (10-15 mCi).
- Blood Imaging is 555-740 MBq (15-20mCi).



KIT FOR PREPARATION OF MEBROFENIN (99mTc)

Single-Use/Multi-dose intravenous

Code: 10 Max Activity: 1850 MBg (50 mCi)

5 vials/box

Mebrofenin 12.5 mg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection

under vacuum

Excipients: Stannous chloride dehydrate

Imaging of the hepatic-biliary system

4 hours after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date
Storage: At 2-8 °C and protect from sunlight



The suggested dose range of $^{99m}\text{Tc-}$ BrIDA injection in the average ADULT patient (70 kg.) is:

- Non-jaundiced patient: 74-185 MBq (2-5 mCi)
- Patient with serum bilirubin level greater than 1.5 mg/ dL: 111-370 MBq (3-10 mCi)



PARS MIBI

Application

Stability

KIT FOR PREPARATION OF SESTAMIBI (99mTc)

Single-Use/Multi-dose intravenous

Code: 12

Max Activity: 18500 MBq (500 mCi)

5 vials/box

Methoxyisobutylisonitril-Cu(l)tetrafluoroborate 0.5 mg /vial Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, sodium pyrophosphate, glycine, cysteine Cardiac myocardial perfusion imaging
Parathyroid scan

6 hours after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date
Storage: At 2-8 °C and protect from sunlight



The suggested dose range of $^{\rm 99m} Tc\text{-}$ MIBI injection in the average ADULT patient (70 kg.) for:

- Cardiac myocardial perfusion imaging is 200-2000 MBq (5.4-54 mCi).

State: 400 MBq (10.8 mCi) rest phase, 1.1 GBq (29.7 mCi) stress phase

Timing: Image 45-60 minutes following injection allowing for

clearance of tracer from the lungs and liver

Indications: investigation of chest pain, suspicion of coronary artery disease, pre-surgical workup including prior to renal transplantation

- Parathyroid scan is 740 MBq (20 mCi)

Timing: early scan at 15 min; delayed scan at 2 hours

How to use:







Single-Use/Multi-dose intravenous

Code: 14

Max Activity: 3700 MBq (100 mCi)

5 vials/box

Excipients:

Phytic acid 10 mg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection

under vacuum

Stannous chloride dehydrate

Application

- · Imaging of the liver and spleen
- Imaging of lymphoscintigraphy
- · Imaging of bone-marrow

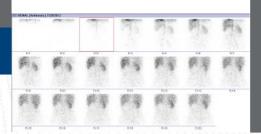
tability

6 hours after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date Storage: At 2-8 °C and protect from sunlight



The suggested dose range of 99m Tc- Phytate injection in the average ADULT patient (70 kg.) is 74-185 MBq (2-5mCi).



PARS EC

Application

Stability

KIT FOR PREPARATION OF ETHYLENEDICYSTEINE (99mTc)

Single-Use/Multi-dose intravenous

Code: 16 Max Activity: 3700 MBq (100 mCi)

4 vials/ box

Excipients:

- · 2 Colorless vial (lyophilized powder)
- 2 Colorless vial (Buffer solution)

Ethylene-dicysteine 1 mg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Stannous chloride dehydrate, mannitol

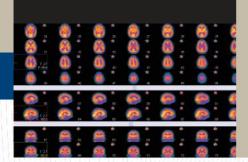
• Dynamic imaging of kidney and urinary tract function

4 hours after completion of radiolabeling procedure in below 25 $^{\circ}\text{C}$ condition

Shelf-life: 12 Months from the manufacture date
Storage: At 2-8 °C and protect from sunlight



The suggested dose range of 99m Tc- EC injection in the average ADULT patient (70 kg.) is 90 -120 MBq (2.43-3.24 mCi).



PARS ECD

• SPECT Radiopharmaceutical kit

KIT FOR PREPARATION OF BICISATE (99mTc)

Single-Use/Multi-dose intravenous

Code: Max Activity:

3700 MBq (100 mCi)

4 vials/ box

- · 2 Colorless vial (lyophilized powder)
- 2 Colorless vial (Buffer solution)
 Bicisate (Ethyl cysteinate dimer) 1 mg /vial
 Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, mannitol, EDTA

Brain perfusion imaging

4 hours after completion of radiolabeling procedure in below 25 $^{\circ}\text{C}$ condition

Shelf-life: 12 Months from the manufacture date
Storage: At 2-8 °C and protect from sunlight



The suggested dose range of ^{99m}Tc- ECD injection in the average ADULT patient (70 kg.) is 740 MBq (20 mCi).



KIT FOR PREPARATION OF MACROAGGREGATED-ALBUMIN (99mTc)

PARS MAA

Application

Stability

Single-Use/Multi-dose intravenous

Code: 18

Max Activity: 5550 MBq (150 mCi)

5 vials/ box

Albumine Macroaggregate 3 mg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, sodium acetate, sodium chloride

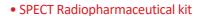
· Pulmonary perfusion imaging

6 hours after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date Storage: At 2-8 °C and protect from sunlight



The suggested dose range of ^{99m}Tc- MAA injection in the average ADULT patient (70 kg.) is 37-185 MBq (1-5 mCi). The minimal particle number for lung perfusion scintigraphy is 50000 particles, the optimal quantity is 100-150000 particles and 500000 particles are the maximum quantity for a diagnostically adequate and free from risk examination is suggested.







PARS Antimony

Single-Use/Multi-dose intravenous Code: Max Activity: 3700 MBq (100 mCi)

3 vials/box

- · 1 Colorless vial (Yellow color solution kit)
- · 1 Colorless vial (Buffer solution)
- 1 Colorless vial (Hydrochloric acid solution)

Antimony TS 1.5 mg /vial

Sterile, non-pyrogenic for IV injection under vacuum

Excipients: PVP

 Lymph node imaging (lymphoscintigraphy) Application

· Imaging of bone-marrow

4 hours after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date Storage: At 2-8 °C and protect from sunlight





KIT FOR PREPARATION OF HYNIC-TOC (99mTc)

Single-Use/ Double-dose intravenous

Code: 23 Max Activity: 1480 MBg (40 mCi)

1 vials/ box

HYNIC-Tyrosine-Octreotide 25 µg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, tricine, EDDA, mannitol

Diagnosis of neuroendocrine tumors with somatostatin receptors

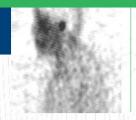
4 hours after completion of radiolabeling procedure in below 25 °C condition

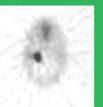
Shelf-life: 12 Months from the manufacture date: Storage: In a freezer at (-8 °C to -20 °C)



The suggested dose range of $^{99m}\text{Tc-}$ HYNIC-TOC injection in the average ADULT patient (70 kg.) is 370-740 MBq (10-20mCi).

Stability





PARS TATE

KIT FOR PREPARATION OF HYNIC-TOC (99mTc)

Application

Stability

Single-Use/ Double-dose intravenous

Code: 24

Max Activity: 1480 MBg (40 mCi)

1 vials/ box

HYNIC-Tyrosine-Octreotate 25 µg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, tricine, EDDA, mannitol

Diagnosis of neuroendocrine tumors with somatostatin receptors

4 hours after completion of radiolabeling procedure in below 25 °C condition

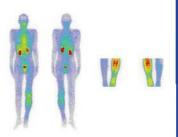
Shelf-life: 12 Months from the manufacture date: Storage: In a freezer at (-8 °C to -20°C)



How to use:

The suggested dose range of ^{99m}Tc- HYNIC-TATE injection in the average ADULT patient (70 kg.) is 370-740 MBq (10-20mCi).





PARS UBI

Application

Stability

KIT FOR PREPARATION OF HYNIC-UBI (99mTc)

Single-Use/ Double-dose intravenous

Code: 25 Max Activity: 1480 MBg (40 mCi)

1 vials/ box

HYNIC-Ubiquicidin[29-41] 50 µg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, tricine, sodium acetate, mannitol

Diagnosis and differentiation of infection from sterile inflammation and microbial or bacterial infections

4 hours after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date: Storage: In a freezer at (-8 °C to -20 °C)



The suggested dose range of ^{99m}Tc- HYNIC-UBI injection in the average ADULT patient (70 kg.) is 370-740 MBq (10-20mCi).





PARS BOMBESIN

SPECT Radiopharmaceutical kit

KIT FOR PREPARATION OF HYNIC-BOMBESIN (99mTc)

Single-Use/Double-dose intravenous

Code: 26

Max Activity: 1480 MBq (40 mCi)

1 vials/ box

HYNIC-GABA-Bombesin(7-14) 25 µg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, tricine, EDDA, mannitol

Localization, staging and follow-up after treatment of breast and prostate tumors with GRP receptors

4 hours after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date: Storage: In a freezer at (-8 °C to -20°C)



How to use:

The suggested dose range of 99m Tc- HYNIC-Bombesin injection in the average ADULT patient (70 kg.) is 370-740 MBq (10-20mCi).





KIT FOR PREPARATION OF TRODAT (99mTc)

Single-Use/Single-dose intravenous

Code: 2

Max Activity: 1665 MBq (40 mCi)

1 vials/ box

Trodat 33 µg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, tricine, mannitol

Diagnosis of Parkinson's disease and its progression

4 hours after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 6 Months from the manufacture date: Storage: In a freezer at (-8 °C to -20°C)



How to use:

The suggested dose range of 99m Tc-Trodate injection in the average ADULT patient (70 kg.) is 814-1036 MBq (22-28 mCi).

Application

Stability



PARS TECTO PSMA

• SPECT Radiopharmaceutical kit

KIT FOR PREPARATION OF HYNIC-PSMA11 (99mTc)

Applicatior

Stability

Single-Use/Double-dose intravenous

Code: 30

Max Activity: 1480 MBq (40 mCi)

1 vials/ box

HYNIC-PSMA11 20 µg /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Stannous chloride dehydrate, tricine, EDDA, mannitol

Diagnosis and staging of metastatic prostate cancer

4 hours after completion of radiolabeling procedure in below 25 °C condition

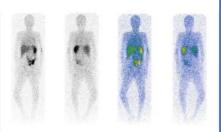
Shelf-life: 12 Months from the manufacture date: Storage: In a freezer at (-8 °C to -20°C)



ow to use.

The suggested dose range of ^{99m}Tc- Hynic-PSMA11 injection in the average ADULT patient (70 kg.) is 814-1036 MBq (22-28 mCi).





PARS WBC

KIT FOR PREPARATION OF WHITE BLOOD CELL (99mTc)



How to use:

The suggested dose range of 99m Tc- WBC injection in the average ADULT patient (70 kg.) is 185-370 MBq (5-10 mCi).

To avoid degradation of the radiopharmaceutical and radiation damage to labelled cells, ^{99m}Tc-HMPAO labelled WBC should be re-injected as soon as possible, but not later than 30 minutes after labelling.

KIT FOR PREPARATION OF THERAPEUTIC DOTA-PSMA (177Lu)

PARS LUTO PSMA

Application

Single-Use/Single-dose intravenous

Code:

Max Activity: 7400 MBq (200 mCi)

1 vials/ box

DOTA-PSMA617 / vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Sodium ascorbate, sodium acetate, mannitol.

Theranostics of metastatic prostate cancer

7 days after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date Storage: In a freezer at (-8 °C to -20°C)



How to like.

The suggested dose range of 177 Lu-PSMA injection in the average ADULT patient (70 kg.) is 7400 MBq (200 mCi).



KIT FOR PREPARATION OF THERAPEUTIC DOTA-TATE (177Lu)

PARS LUTO TATE

Application

Stability

Single-Use/Single-dose intravenous

Code:

Max Activity: 7400 MBq (200 mCi)

1 vials/box

DOTA-TATE / vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Sodium ascorbate, sodium acetate, mannitol

Theranostics of metastatic neuroendocrine tumor

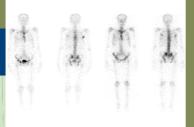
7 days after completion of radiolabeling procedure in below 25 °C condition

Shelf-life: 12 Months from the manufacture date: Storage: In a freezer at (-8 °C to -20°C)



How to use:

The suggested dose range of 177 Lu-PSMA injection in the average ADULT patient (70 kg.) is 7400 MBq (200 mCi).



PARS EDTMP

• Theranostics radiopharmaceutical kit

KIT FOR PREPARATION OF THERAPEUTIC EDTMP (177Lu)

Single-Use/Single-dose intravenous

Code:

Max Activity: 2960 MBq (80 mCi)

EDTMP vial sterile, non-pyrogenic, lyophilized powder for IV injection.

5 vials/box

EDTMP /vial

Sterile, non-pyrogenic, lyophilized powder for IV injection under vacuum

Excipients: Sodium chloride

Bone pain palliation in cancer metastases

4 days after labeling in below -10 °C condition

Shelf-life: 12 Months from the manufacture Storage: At 2-8 °C and protect from sunlight



How to use:

The suggested dose range of ¹⁷⁷Lu-EDTMP injection in the average ADULT patient (70 kg.) is 2960 MBq (80 mCi).





PARS HEDP

KIT FOR PREPARATION OF THERAPEUTIC HEDP (188 Re)

Single-Use/Single-dose intravenous

Code:

101

Application

Stability

Max Activity:

2960 MBq (80 mCi)

HEDP vial sterile, non-pyrogenic, lyophilized powder for IV injection

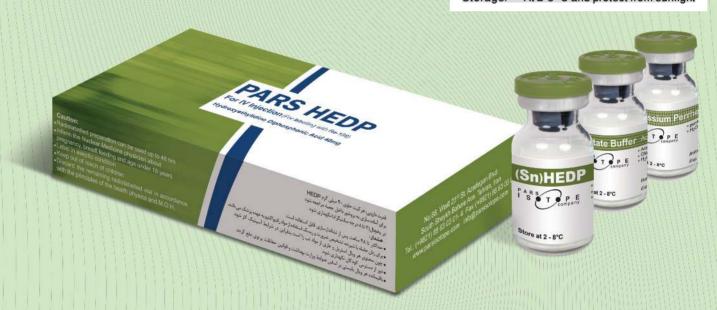
5 vials/box

Each package contains 5 vial (1 vial HEDP KIT non-pyrogenic, lyophilized powder for IV injection + 1 vial acetate buffer + 1 vial potassium perrhenate + 1 vacuum vial + 1 vial saline 0.9%) injection.

Relieve the severe pain of bone metastases

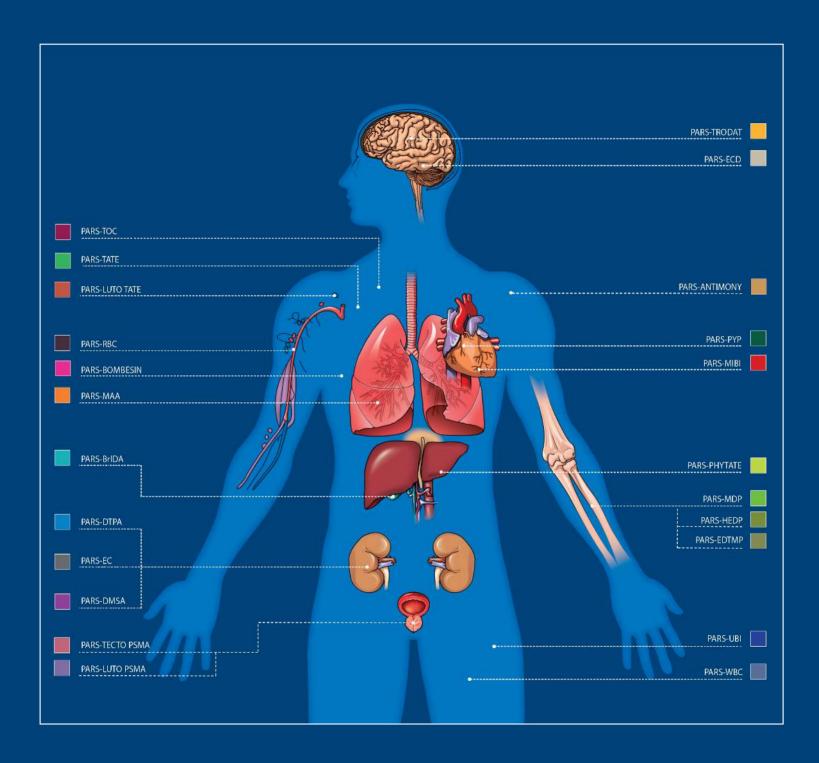
3 days after labeling in below 25 °C condition

Shelf-life: 12 Months from the manufacture Storage: At 2-8 °C and protect from sunlight



How to use:

The suggested activity range is 7400 MBq (80 mCi) in one single intravenous injection.





P E company

