# $4\_PET\_CT\_LM\_FET\_Brain\_Terapi\_neuroperf\_dyn.Adult\_PET4$

23. januar 2013

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## 1 Topogram

## 1.1 Routine

• mA: 35

• kV: 120

• Topogram length: 256 mm

• Tube position: Lateral

#### 1.2 Scan

• mA: 35

• kV: 120

• Delay: 4s

• Topogram length: 256 mm

• Direction: Craniocaudal

• Tube position: Lateral

• API: API

• Kernel: 20

• Window: Topogram

## 2 CT

## 2.1 Routine

• Eff. mAs: 340

• kV: 120

• CARE Dose4D: Off

• CareDoseType: CareDoseAEC

 $\bullet$  CTDlvol: 58.072mGy

• Scan time: 26.420 s

• Delay: 2.000 s

• Slice: 1 mm

• No. of images: Samme som i foerste recon, slet?(y/n)

• Tilt: 0.0 grader

## 2.2 Scan

• Quality ref. mAs: 350

• Eff. mAs: 340

• kV: 120

 $\bullet$  Scan time: 26.420 s

• Rotation time: 1.000 s

• Delay: 2.000 s

• Slice: 1 mm

• Pitch: 1.50

• Direction: Caudocranial

## 2.3 Recons

#### 2.3.1 Recon 1

• Series description: tmp CT RTD

• Slice: 5

• Kernel: H19s

• Window: Cerebrum

• Extended FoV: Off

• FoV: 300

• Center X: 0

• Center Y: 0

• Mirroring: None

• Extended CT scale: Standard

• Recon job: Axial

• Recon Axis: Axial

• Image order: Caudocranial

• Recon increment: 5.000

• No. of images: 45

#### 2.3.2 Recon 2

• Series description: AC CT 1mm

• Slice: 1

• Kernel: H19s

• Window: Cerebrum

• Extended FoV: Off

• FoV: 300

• Center X: 0

• Center Y: 0

• Mirroring: None

• Extended CT scale: Standard

• Recon job: Axial

• Recon Axis: Axial

• Image order: Caudocranial

• Recon increment: 1.000

• No. of images: 224

#### 2.3.3 Recon 3

• Series description: CT 1mm Brain H31s

• Slice: 1

• Kernel: H31s

• Window: Cerebrum

• Extended FoV: Off

• FoV: 300

• Center X: 0

• Center Y: 0

• Mirroring: None

• Extended CT scale: Standard

• Recon job: Axial

• Recon Axis: Axial

• Image order: Caudocranial

• Recon increment: 1.000

• No. of images: 224

#### 2.3.4 Recon 4

• Series description: CT 3.0mm BrainH31s

• Slice: 3

• Kernel: H31s

• Window: Cerebrum

• Extended FoV: Off

• FoV: 300

• Center X: 0

• Center Y: 0

• Mirroring: None

• Extended CT scale: Standard

• Recon job: Axial

• Recon Axis: Axial

• Image order: Caudocranial

• Recon increment: 3.000

• No. of images: 75

#### 2.3.5 Recon 5

• Series description: CT 8.0mm BrainH31s

• Slice: 8

• Kernel: H31s

• Window: Cerebrum

• Extended FoV: Off

• FoV: 300

• Center X: 0

• Center Y: 0

• Mirroring: None

• Extended CT scale: Standard

• Recon job: Axial

• Recon Axis: Axial

• Image order: Caudocranial

• Recon increment: 8.000

• No. of images: 28

## 3 Pause

## 4 PET Brain LM

## 4.1 Routine

• Isotope: F-18

• Pharm.: FET

• Inj. Dose: 1000000 Bequerels

• Scan mode: List mode

• Scan range: Do not match CT FOV

• No. of beds: Not given. Check recon range

• Scan duration/bed: 40.000000 Minutes

## 4.2 Scan

• Autoload: Off

• Rebinner LUT: Off

• Scan output: List mode

• Sinogram mode: false

• Input trigger signal: None

• LLD (keV): n/a

• ULD (keV): n/a

#### 4.3 Recons

#### 4.3.1 Recon 1

• Series description: FET dyn 20-40min 5mm CT3mm

• Recon range (bed): 1 to 1

• Output image type: Corrected

- Recon method: Iterative3D
- Iterations: 4
- Subsets: 12
- Image size: 400
- Zoom: 2.500000
- Filter: Gaussian
- FWHM (mm): 5.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off ()
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 4.3.2 Recon 2

- Series description: FET dyn 10-30min 5mm CT8mm
- Recon range (bed): 1 to 1
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 4
- Subsets: 12
- Image size: 400
- Zoom: 2.500000
- Filter: Gaussian
- FWHM (mm): 5.000000
- Offset X: 0 mm

- Offset Y: 0 mm
- Attenuation correction: Off ()
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 4.3.3 Recon 3

- Series description: FET dyn 8f 5min 5mm CT3mm
- Recon range (bed): 1 to 1
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 4
- Subsets: 12
- Image size: 400
- Zoom: 2.500000
- Filter: Gaussian
- FWHM (mm): 5.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off ()
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 4.3.4 Recon 4

- Series description: FET Dyn 22f 5mm CT3mm
- Recon range (bed): 1 to 1
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 4
- Subsets: 12
- Image size: 400
- Zoom: 2.500000
- Filter: Gaussian
- FWHM (mm): 5.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off ()
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 4.3.5 Recon 5

- Series description: FET dyn 25-35min 5mm CT3mm
- Recon range (bed): 1 to 1
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 4
- Subsets: 12
- Image size: 400

• Zoom: 2.500000

• Filter: Gaussian

• FWHM (mm): 5.000000

• Offset X: 0 mm

• Offset Y: 0 mm

• Attenuation correction: Off ()

• Scatter correction: On

• Match CT slice location: On

• Save intermediate data: Off

## 5 Pause

## 6 DynMulti4D

### 6.1 Routine

• Eff. mAs: 181

• kV: 80

• CARE Dose4D: Off

• CareDoseType: CareDose

• CTDlvol: 328.42mGy

 $\bullet$  Scan time: 1.500 s

• Delay: 4.000 s

• Slice: 5 mm

• No. of images: Samme som i foerste recon, slet?(y/n)

• Tilt: 0.0 grader

## 6.2 Scan

• Quality ref. mAs: 250

• Eff. mAs: 181

• kV: 80

• Scan time: 1.500 s

• Rotation time: 0.330 s

• Delay: 4.000 s

• Slice: 5 mm

• Pitch: 1.10

• Direction: Caudocranial

## 6.3 Recons

#### 6.3.1 Recon 1

• Series description: tmp DynMulti4D RTD

• Slice: 4

• Kernel: H20f

• Window: Cerebrum

• Extended FoV: Off

• FoV: 200

• Center X: 0

• Center Y: 0

• Mirroring: None

• Extended CT scale: Standard

• Recon job: Axial

• Recon Axis: Axial

• Image order: Caudocranial

• Recon increment: 31.300

• No. of images: 90

#### 6.3.2 Recon 2

• Series description: VPCT DynMulti4D 5.0 H20f

• Slice: 5

• Kernel: H20f

• Window: Cerebrum

• Extended FoV: Off

• FoV: 200

• Center X: 0

• Center Y: 0

• Mirroring: None

• Extended CT scale: Standard

• Recon job: Axial

• Recon Axis: Axial

• Image order: Caudocranial

• Recon increment: 5.000

• No. of images: 390

#### 6.3.3 Recon 3

• Series description: VPCT DynMulti4D 7.0 H20f

• Slice: 7

• Kernel: H20f

• Window: Cerebrum

• Extended FoV: Off

• FoV: 200

• Center X: 0

• Center Y: 0

• Mirroring: None

• Extended CT scale: Standard

• Recon job: Axial

• Recon Axis: Axial

• Image order: Caudocranial

• Recon increment: 7.000

• No. of images: 270

#### 6.3.4 Recon 4

• Series description: VPCT DynMulti4D 10.0 H20f

• Slice: 10

• Kernel: H20f

• Window: Cerebrum

• Extended FoV: Off

• FoV: 200

• Center X: 0

• Center Y: 0

• Mirroring: None

• Extended CT scale: Standard

• Recon job: Axial

• Recon Axis: Axial

• Image order: Caudocranial

• Recon increment: 10.000

• No. of images: 180