

# 4\_PET\_CT\_WB\_FDG\_Terapi\_IV\_Breathhold.Adult\_PET4

3. december 2012

# Indhold

<b>1</b>	<b>Topogram</b>	<b>1</b>
1.1	Routine . . . . .	1
1.2	Scan . . . . .	1
<b>2</b>	<b>PreMonitoring</b>	<b>1</b>
2.1	Routine . . . . .	1
2.2	Scan . . . . .	2
2.3	Recons . . . . .	2
2.3.1	Recon 1 . . . . .	2
<b>3</b>	<b>Monitoring</b>	<b>3</b>
3.1	Routine . . . . .	3
3.2	Scan . . . . .	4
3.3	Recons . . . . .	4
3.3.1	Recon 1 . . . . .	4
<b>4</b>	<b>WB CT</b>	<b>5</b>
4.1	Routine . . . . .	5
4.2	Scan . . . . .	5
4.3	Recons . . . . .	6
4.3.1	Recon 1 . . . . .	6
4.3.2	Recon 2 . . . . .	6
4.3.3	Recon 3 . . . . .	7
4.3.4	Recon 4 . . . . .	8
4.3.5	Recon 5 . . . . .	8
<b>5</b>	<b>Pause</b>	<b>9</b>
<b>6</b>	<b>PET WB</b>	<b>9</b>
6.1	Routine . . . . .	9
6.2	Scan . . . . .	9
6.3	Recons . . . . .	10
6.3.1	Recon 1 . . . . .	10
6.3.2	Recon 2 . . . . .	11
<b>7</b>	<b>Pause</b>	<b>11</b>
<b>8</b>	<b>CT Lunge</b>	<b>11</b>
8.1	Routine . . . . .	11
8.2	Scan . . . . .	12
8.3	Recons . . . . .	12
8.3.1	Recon 1 . . . . .	12

8.3.2	Recon 2 . . . . .	13
8.3.3	Recon 3 . . . . .	14
<b>9</b>	<b>Pause</b>	<b>14</b>
<b>10</b>	<b>PET Lunge</b>	<b>14</b>
10.1	Routine . . . . .	14
10.2	Scan . . . . .	15
10.3	Recons . . . . .	15
10.3.1	Recon 1 . . . . .	15
10.3.2	Recon 2 . . . . .	16
10.3.3	Recon 3 . . . . .	17
<b>11</b>	<b>Pause</b>	<b>17</b>
<b>12</b>	<b>PET Lunge</b>	<b>17</b>
12.1	Routine . . . . .	17
12.2	Scan . . . . .	18
12.3	Recons . . . . .	18
12.3.1	Recon 1 . . . . .	18
12.3.2	Recon 2 . . . . .	19
12.3.3	Recon 3 . . . . .	20

# **1 Topogram**

## **1.1 Routine**

- mA: 35
- kV: 120
- Topogram length: 1024 mm
- Tube position: Top

## **1.2 Scan**

- mA: 35
- kV: 120
- Delay: 4s
- Topogram length: 1024 mm
- Direction: Craniocaudal
- Tube position: Top
- API: API
- Kernel: 80
- Window: Topogram

# **2 PreMonitoring**

## **2.1 Routine**

- Eff. mAs: 20
- kV: 120
- CARE Dose4D: Off
- CareDoseType: CareDoseAEC
- CTDIvol: 1.186mGy

- Scan time: 0.500 s
- Delay: 2.000 s
- Slice: 10 mm
- No. of images: Samme som i foerste recon, slet?(y/n)
- Tilt: 0.0 grader

## **2.2 Scan**

- Quality ref. mAs: 225
- Eff. mAs: 20
- kV: 120
- Scan time: 0.500 s
- Rotation time: 0.500 s
- Delay: 2.000 s
- Slice: 10 mm
- Pitch: 0.00
- Direction: Craniocaudal

## **2.3 Recons**

### **2.3.1 Recon 1**

- Series description: PreMonitoring 10.0 eFoV
- Slice: 10
- Kernel: B19s
- Window: Abdomen
- Extended FoV: On
- FoV: 780
- Center X: 0

- Center Y: 0
- Mirroring: None
- Extended CT scale: Standard
- Recon job: Axial
- Recon Axis: Axial
- Image order: Craniocaudal
- Recon increment: 10.000
- No. of images: 1

## **3 Monitoring**

### **3.1 Routine**

- Eff. mAs: 20
- kV: 120
- CARE Dose4D: Off
- CareDoseType: CareDoseAEC
- CTDIvol: 35.58mGy
- Scan time: 0.500 s
- Delay: 10.000 s
- Slice: 10 mm
- No. of images: Samme som i foerste recon, slet?(y/n)
- Tilt: 0.0 grader

## **3.2 Scan**

- Quality ref. mAs: 225
- Eff. mAs: 20
- kV: 120
- Scan time: 0.500 s
- Rotation time: 0.500 s
- Delay: 10.000 s
- Slice: 10 mm
- Pitch: 0.00
- Direction: Craniocaudal

## **3.3 Recons**

### **3.3.1 Recon 1**

- Series description: Monitoring 10.0 eFoV
- Slice: 10
- Kernel: B19s
- Window: Abdomen
- Extended FoV: On
- FoV: 780
- Center X: 0
- Center Y: 0
- Mirroring: None
- Extended CT scale: Standard
- Recon job: Axial
- Recon Axis: Axial
- Image order: Craniocaudal

- Recon increment: 10.000
- No. of images: 30

## **4 WB CT**

### **4.1 Routine**

- Eff. mAs: 200
- kV: 120
- CARE Dose4D: On
- CareDoseType: CareDoseAEC
- CTDLvol: 14.56mGy
- Scan time: 32.530 s
- Delay: 4.000 s
- Slice: 2 mm
- No. of images: Samme som i foerste recon, slet?(y/n)
- Tilt: 0.0 grader

### **4.2 Scan**

- Quality ref. mAs: 200
- Eff. mAs: 200
- kV: 120
- Scan time: 32.530 s
- Rotation time: 0.500 s
- Delay: 4.000 s
- Slice: 2 mm
- Pitch: 0.80
- Direction: Craniocaudal



## **4.3 Recons**

### **4.3.1 Recon 1**

- Series description: tmp WB CT RTD
- Slice: 4
- Kernel: B19f
- Window: Abdomen
- Extended FoV: Off
- FoV: 500
- Center X: 0
- Center Y: 0
- Mirroring: None
- Extended CT scale: Standard
- Recon job: Axial
- Recon Axis: Axial
- Image order: Craniocaudal
- Recon increment: 4.000
- No. of images: 245

### **4.3.2 Recon 2**

- Series description: AC CT 2 mm
- Slice: 2
- Kernel: B19f
- Window: Abdomen
- Extended FoV: On
- FoV: 780
- Center X: 0

- Center Y: 0
- Mirroring: None
- Extended CT scale: Standard
- Recon job: Axial
- Recon Axis: Axial
- Image order: Craniocaudal
- Recon increment: 2.000
- No. of images: 489

#### **4.3.3 Recon 3**

- Series description: CT WB 2.0 B30f
- Slice: 2
- Kernel: B30f
- Window: Abdomen
- Extended FoV: Off
- FoV: 500
- Center X: 0
- Center Y: 0
- Mirroring: None
- Extended CT scale: Standard
- Recon job: Axial
- Recon Axis: Axial
- Image order: Craniocaudal
- Recon increment: 2.000
- No. of images: 489

#### **4.3.4 Recon 4**

- Series description: CT WB 2.0 cor B30f
- Slice: 2
- Kernel: B30f
- Window: Abdomen
- Extended FoV: Off
- FoV: 977
- Center X: 0
- Center Y: 0
- Mirroring: None
- Extended CT scale: Standard
- Recon job: 3D
- Recon Axis: Coronal
- Image order: AP
- Recon increment: 2.000
- No. of images: 251

#### **4.3.5 Recon 5**

- Series description: CT WB 2.0 sag B30f
- Slice: 2
- Kernel: B30f
- Window: Abdomen
- Extended FoV: Off
- FoV: 977
- Center X: 0
- Center Y: 0

- Mirroring: None
- Extended CT scale: Standard
- Recon job: 3D
- Recon Axis: Sagittal
- Image order: LeftToRight
- Recon increment: 2.000
- No. of images: 489

## **5    Pause**

## **6    PET WB**

### **6.1   Routine**

- Isotope: F-18
- Pharm.: Fluorodeoxyglucose
- Inj. Dose: 265000000.000000 Bequerels
- Inj. date (date/month - year): 23/05 - 2012
- Inj. time: 11:47:01
- Scan mode: Sinogram
- Scan range: Match CT FOV
- No. of beds: Not given. Check recon range
- Scan duration/bed: 2.000000 Minutes

### **6.2   Scan**

- Autoload: On
- Rebinner LUT: N/A
- Scan output: Sinogram

- Sinogram mode: false
- Input trigger signal: None
- LLD (keV): N/A
- ULD (keV): N/A

## **6.3 Recons**

### **6.3.1 Recon 1**

- Series description: PET WB Image check HD
- Recon range (bed): 1 to 7
- Output image type: Corrected
- Recon method: TrueX
- Iterations: 2
- Subsets: 12
- Image size: 200
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

### **6.3.2 Recon 2**

- Series description: PET WB Corr TrueX+TOF 2 mm
- Recon range (bed): 1 to 7
- Output image type: Corrected
- Recon method: TrueXTOF
- Iterations: 2
- Subsets: 21
- Image size: 400
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 2.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

## **7 Pause**

## **8 CT Lunge**

### **8.1 Routine**

- Eff. mAs: 225
- kV: 120
- CARE Dose4D: On
- CareDoseType: CareDoseAEC

- CTDlvol: 17.1mGy
- Scan time: 0.970 s
- Delay: 10.000 s
- Slice: 3 mm
- No. of images: Samme som i foerste recon, slet?(y/n)
- Tilt: 0.0 grader

## **8.2 Scan**

- Quality ref. mAs: 225
- Eff. mAs: 225
- kV: 120
- Scan time: 0.970 s
- Rotation time: 0.500 s
- Delay: 10.000 s
- Slice: 3 mm
- Pitch: 1.40
- Direction: Caudocranial

## **8.3 Recons**

### **8.3.1 Recon 1**

- Series description: tmp CT Lunge RTD
- Slice: 5
- Kernel: B18f
- Window: Mediastinum
- Extended FoV: Off
- FoV: 500

- 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: 1

### **8.3.2 Recon 2**

- Series description: CT Lunge 3.0 eFoV
- Slice: 3
- Kernel: B18f
- Window: Mediastinum
- Extended FoV: On
- FoV: 780
- Center X: 0
- Center Y: 0
- Mirroring: None
- Extended CT scale: Standard
- Recon job: Axial
- Recon Axis: Axial
- Image order: Craniocaudal
- Recon increment: 3.000
- No. of images: 1



### **8.3.3 Recon 3**

- Series description: CT CT Lunge 3.0 B70f
- Slice: 3
- Kernel: B70f
- Window: Lung
- Extended FoV: Off
- FoV: 331
- Center X: 0
- Center Y: 0
- Mirroring: None
- Extended CT scale: Standard
- Recon job: Axial
- Recon Axis: Axial
- Image order: Craniocaudal
- Recon increment: 3.000
- No. of images: 1

## **9 Pause**

## **10 PET Lunge**

### **10.1 Routine**

- Isotope: F-18
- Pharm.: Fluorodeoxyglucose
- Inj. Dose: 300000000.000000 Bequerels
- Inj. date (date/month - year): 23/05 - 2012
- Inj. time: 11:47:01

- Scan mode: Sinogram
- Scan range: Match CT FOV
- No. of beds: Not given. Check recon range
- Scan duration/bed: 20.000000 Seconds

## **10.2 Scan**

- Autoload: Off
- Rebinner LUT: N/A
- Scan output: Sinogram
- Sinogram mode: false
- Input trigger signal: None
- LLD (keV): N/A
- ULD (keV): N/A

## **10.3 Recons**

### **10.3.1 Recon 1**

- Series description: PET Lunge Iterativ
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 4
- Subsets: 8
- Image size: 200
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4.000000

- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

### **10.3.2 Recon 2**

- Series description: PET Lunge TrueX+TOF
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 3
- Subsets: 24
- Image size: 400
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

### **10.3.3 Recon 3**

- Series description: PET Lunge OSEM
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 4
- Subsets: 8
- Image size: 256
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

## **11 Pause**

## **12 PET Lunge**

### **12.1 Routine**

- Isotope: F-18
- Pharm.: Fluorodeoxyglucose
- Inj. Dose: 300000000.000000 Bequerels
- Inj. date (date/month - year): 23/05 - 2012

- Inj. time: 11:47:01
- Scan mode: Sinogram
- Scan range: Match CT FOV
- No. of beds: Not given. Check recon range
- Scan duration/bed: 20.000000 Seconds

## **12.2 Scan**

- Autoload: Off
- Rebinner LUT: N/A
- Scan output: Sinogram
- Sinogram mode: false
- Input trigger signal: None
- LLD (keV): N/A
- ULD (keV): N/A

## **12.3 Recons**

### **12.3.1 Recon 1**

- Series description: PET Lunge Iterativ
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 4
- Subsets: 8
- Image size: 200
- Zoom: 1
- Filter: Gaussian

- FWHM (mm): 4.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

### **12.3.2 Recon 2**

- Series description: PET Lunge TrueX+TOF
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 3
- Subsets: 24
- Image size: 400
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

### 12.3.3 Recon 3

- Series description: PET Lunge OSEM
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative3D
- Iterations: 4
- Subsets: 8
- Image size: 256
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4.000000
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: Off (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off