# $PROJ\_Breathhold\_FDG\_PET\_5.MlAdult\_PET5$

17. november 2012

# Indhold

1	Top	ogram																							1
	1.1	Routin	ie																						1
	1.2	Scan								•				•	 •	•					•	•		•	1
2	2 CT Lung																	1							
	2.1	Routin	ie																						1
	2.2	Scan																							2
	2.3	Recons	3																						2
		2.3.1																							2
		2.3.2	Recon 2																						3
3	Pau	se																							4
•	1 44	.50																							
4	8														4										
	4.1		ie																						4
	4.2	Scan																							4
	4.3	Recons	3																					•	5
		4.3.1	Recon 1																					•	5
		4.3.2	Recon 2																						5
		4.3.3	Recon 3			•				•					 •		 •			 •	•		•	•	6
5	Pau	.se																							7
6	$\mathbf{PE}^{r}$	Γ Lung	,																						7
Ū	6.1	_	e																						7
	6.2																								7
	6.3	Recons	5																						8
		6.3.1	Recon 1																						8
		6.3.2	Recon 2																						8
		6.3.3	Recon 3																						9
7	Pau	se																							10
•																									10
8		$\Gamma_{ m Lung}$	•																						10
	8.1		ie																						10
	8.2																								10
	8.3		5																						11
		8.3.1	Recon 1																						11
		8.3.2	Recon 2																						11
		8 3 3	Recon 3																						12

## 1 Topogram

### 1.1 Routine

• mA: 35

• kV: 120

• Topogram length: 0 mm

• Tube position: Top

#### 1.2 Scan

• mA: 35

• kV: 120

• Delay: 4s

• Topogram length: 0 mm

• Direction: Craniocaudal

• Tube position: Top

• API: None

• Kernel: 80s shar

• Window: Topogram Body

## 2 CT Lung

### 2.1 Routine

• Eff. mAs: 225

• kV: 120

• CARE Dose4D: On

• CareDoseType: CareDoseAEC

• CTDlvol: 15.1475mGy

• Scan time: 14.840 s

• Delay: 4.000 s

• Slice: 3.00 mm

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

• Tilt: 0.0 grader

### 2.2 Scan

• Quality ref. mAs: 225

• Eff. mAs: 225

• kV: 120

• Scan time: 14.840 s

• Rotation time: 0.500 s

• Delay: 4.000 s

• Slice: 3.00 mm

• Pitch: 1.2000000

• Direction: Craniocaudal

### 2.3 Recons

#### 2.3.1 Recon 1

• Series description: AC CT

• Slice: 3.00

• Kernel: B19f PET very smooth

• Window: Mediastinum

• Extended FoV: On

• FoV: 700

• 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: 324

#### 2.3.2 Recon 2

• Series description: CT Lung 3.0 B30f

• Slice: 3.00

• Kernel: B30f medium smooth

• 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: Craniocaudal

• Recon increment: 3.000

• No. of images: 324

### 3 Pause

## 4 PET Lung

### 4.1 Routine

• Isotope: F-18

• Pharm.: FDG

• Inj. Dose: 1 MegaBequerels

 $\bullet\,$  Inj. date (date/month - year): 16/08 - 2012

• Inj. time: 15:40:00

• Scan mode: Sinogram

• Scan range: Match CT FOV

• No. of beds: 1

• Scan duration/bed: 20 Seconds

### 4.2 Scan

• Autoload: On

• Rebinner LUT: Off

• Scan output: Sinogram

• Sinogram mode: Trues

• Input trigger signal: None

• LLD (keV): 435

• ULD (keV): 650

### 4.3 Recons

#### 4.3.1 Recon 1

- Series description: PET 1 Lung Corrected
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative
- Iterations: 4
- Subsets: 8
- Image size: 168
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: On (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 4.3.2 Recon 2

- Series description: PET 1 Lung Corr True X 2 mm
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: TrueX
- Iterations: 3
- Subsets: 21

- Image size: 336
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 2
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: On (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 4.3.3 Recon 3

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

### 5 Pause

## 6 PET Lung

### 6.1 Routine

- Isotope: F-18
- Pharm.: FDG
- Inj. Dose: 1 MegaBequerels
- $\bullet\,$  Inj. date (date/month year): 16/08 2012
- Inj. time: 15:40:00
- Scan mode: Sinogram
- Scan range: Match CT FOV
- No. of beds: 1
- Scan duration/bed: 20 Seconds

### 6.2 Scan

- Autoload: On
- Rebinner LUT: Off
- Scan output: Sinogram
- Sinogram mode: Trues
- Input trigger signal: None
- LLD (keV): 435
- ULD (keV): 650

### 6.3 Recons

#### 6.3.1 Recon 1

- Series description: PET 2 Lung Corrected
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative
- Iterations: 4
- Subsets: 8
- Image size: 168
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: On (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 6.3.2 Recon 2

- Series description: PET 2 Lung Corr True X 2 mm
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: TrueX
- Iterations: 3
- Subsets: 21

- Image size: 336
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 2
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: On (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 6.3.3 Recon 3

- Series description: PET 2 Lung Corrected OSEM
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative
- Iterations: 4
- Subsets: 8
- Image size: 256
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: On (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

### 7 Pause

## 8 PET Lung

### 8.1 Routine

- Isotope: F-18
- Pharm.: FDG
- Inj. Dose: 1 MegaBequerels
- Inj. date (date/month year): 16/08 2012
- Inj. time: 15:40:00
- Scan mode: Sinogram
- Scan range: Match CT FOV
- No. of beds: 1
- Scan duration/bed: 20 Seconds

### 8.2 Scan

- Autoload: On
- Rebinner LUT: Off
- Scan output: Sinogram
- Sinogram mode: Trues
- Input trigger signal: None
- LLD (keV): 435
- ULD (keV): 650

### 8.3 Recons

#### 8.3.1 Recon 1

- Series description: PET 3 Lung Corrected
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative
- Iterations: 4
- Subsets: 8
- Image size: 168
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: On (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 8.3.2 Recon 2

- Series description: PET 3 Lung Corr True X 2 mm
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: TrueX
- Iterations: 3
- Subsets: 21

- Image size: 336
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 2
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: On (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off

#### 8.3.3 Recon 3

- Series description: PET 3 Lung Corrected OSEM
- Recon range (bed): Automatic/All/dunno
- Output image type: Corrected
- Recon method: Iterative
- Iterations: 4
- Subsets: 8
- Image size: 256
- Zoom: 1
- Filter: Gaussian
- FWHM (mm): 4
- Offset X: 0 mm
- Offset Y: 0 mm
- Attenuation correction: On (1)
- Scatter correction: On
- Match CT slice location: On
- Save intermediate data: Off