

## Clinical Instructions

### Indication

Screening for Lung Cancer, This can only be done on CT 3 or 4.

Video for this protocol 

### Oral Contrast

None

### Pre-Scan Instructions

Practice breathing instructions. Ask patient to cough just prior to the scan.

### IV Contrast Parameters

None

### Field of View

Small as appropriate including all of breasts and chest wall.

### Scan Description

- Series 1 - PA and lateral scout: from lower neck to diaphragm on inspiration.
- Series 2 - Helical Inspiration: Start just above the lung apices and extend through the lung bases. If there is a history of or suspected lung cancer, include all of the adrenal glands.

### Reformat Instructions

Perform a manual reformat for the axial MIP. The CO and SA reformats are set-up for DMPR.

### Reformats

Name	Source Recon	DMPR or Manual	Type (MIP, Average, etc.)	WW/WL	Slice Thickness (mm)	Interval (mm)	Orientation
MIPS	THIN ST	Manual	MIP	1500/-700	10	5	axial
SA	BONE	DMPR	Average	1500/-700	1.5	0.75	sagittal Include the spine and sternum.
CO	BONE	DMPR	Average	1500/-700	1.5	0.75	coronal Include the spine and sternum.

### Networking

Please send the entire study to PACS including the Dose Information Slide. Note: if smartprep is used, please also send the screen save (Series 99) of the smartprep locations and enhancement curve.

### Miscellaneous

None

# Acquisition Parameters

## Series 1, Scout

	Small	Medium	Large
Scout 1 kV	100	120	140
Scout 1 mA	10	10	10
Scout 1 Angle	180	180	180
Scout 2 kV	100	120	140
Scout 2 mA	40	40	40
Scout 2 Angle	90	90	90
WW/WL for Scout	500/50	500/50	500/50

## Series 2, Scan Phase

	Small	Medium	Large
Scan Type	Helical	Helical	Helical
Beam Collimation	40	40	40
Detector Rows	64.0	64.0	64.0
Detector Configuration	64x0.625	64x0.625	64x0.625
Scan FOV	Medium Body	Large Body	Large Body
Pitch	1.375	1.375	1.375
Speed (mm/rot)	55.00	55.00	55.00
Rotation Time (s)	0.4	0.4	0.4
kV	100	120	140
AEC type	smart mA	smart mA	smart mA
mA Range	(20-240)	(20-290)	(25-460)
Manual mA	120.0	150.0	280.0
Noise Index	29.5	34.0	37.5
Slice Thickness (mm)	3.75	5	5
Interval (mm)	2.25	3.0	3.0

## Series 2, Recons

	Small	Medium	Large
<b>Recon 1</b>			
<b>DFOV</b>	<b>30</b>	<b>40</b>	<b>50</b>
<b>Recon Type</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>
<b>WW/WL</b>	<b>450/50</b>	<b>450/50</b>	<b>450/50</b>
<b>Recon Option</b>	<b>Plus</b>	<b>Plus</b>	<b>Plus</b>
<b>Recon Option</b>			
<b>ASIR Setup</b>	<b>Slice 30%</b>	<b>Slice 30%</b>	<b>Slice 30%</b>
<b>Slice Thickness (mm)</b>	<b>3.75</b>	<b>5.0</b>	<b>5.0</b>
<b>Interval (mm)</b>	<b>2.25</b>	<b>3.0</b>	<b>3.0</b>
<b>Recon 2</b>			
<b>DFOV</b>	<b>30</b>	<b>40</b>	<b>50</b>
<b>Recon Type</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>
<b>WW/WL</b>	<b>450/50</b>	<b>450/50</b>	<b>450/50</b>
<b>Recon Option</b>	<b>Plus</b>	<b>Plus</b>	<b>Plus</b>
<b>Recon Option</b>	<b>IQ Enhance</b>	<b>IQ Enhance</b>	<b>IQ Enhance</b>
<b>ASIR Setup</b>	<b>Slice 30%</b>	<b>Slice 30%</b>	<b>Slice 30%</b>
<b>Slice Thickness (mm)</b>	<b>1.25</b>	<b>1.25</b>	<b>1.25</b>
<b>Interval (mm)</b>	<b>0.625</b>	<b>0.625</b>	<b>0.625</b>
<b>Recon 3</b>			
<b>DFOV</b>	<b>30</b>	<b>40</b>	<b>50</b>
<b>Recon Type</b>	<b>Bone Plus</b>	<b>Bone Plus</b>	<b>Bone Plus</b>
<b>WW/WL</b>	<b>1500/-700</b>	<b>1500/-700</b>	<b>1500/-700</b>
<b>Recon Option</b>	<b>Plus</b>	<b>Plus</b>	<b>Plus</b>
<b>Recon Option</b>	<b>IQ Enhance</b>	<b>IQ Enhance</b>	<b>IQ Enhance</b>
<b>ASIR Setup</b>	<b>None</b>	<b>None</b>	<b>None</b>
<b>Slice Thickness (mm)</b>	<b>1.25</b>	<b>1.25</b>	<b>1.25</b>
<b>Interval (mm)</b>	<b>0.625</b>	<b>0.625</b>	<b>0.625</b>