Low Dose Lung Screening 64 GE

Indications	Majority of patients screened are between the ages of 55 and 80, Have a smoking history of 30 pack years
	If no longer smoking, stopped smoking in the past 15 years, Persons who have undergone chest CT within 12 months should be excluded
	Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially
	limits life expectancy or the ability or willingness to have curative lung surgery.
Diagnostic Task	Detect abnormalities that may represent lung cancer and may require further diagnostic evaluation. Detect nodules and masses.
	For individuals with no known signs or symptoms of lung cancer that have appropriate risk factors, such as those recommended by
	professional societies and health care organizations.See the ACR LungCancer Screening Resources webpage for more information
Scan mode	Helical
Position/Landmark	Head first-Supine Sternal Notch S50-I300
Topogram	AP 120kV 20mA Lat 120kV 40mA
kVp/Reference mass	120kv mA average pt
Rotation time/pitch	0.5/0.984:1
Detector Configuration	64x0.625
Table Speed/Increment	39
Dose reduction	Noise Index 32
Allowed CTDI ranges*	7mGy-50mGy
XR29 Dose Notification val	50mGy

Helical Set

recon	body part	thickness spacing	recon algorithm	recon destination
1	chest	1.25mmx 1.25mm	standard	pacs
2	lung	1.25mmx 1.25mm	lung	pacs
3	sag chest	2mmx2mm	standard	pacs
4	coronal chest	2mmx2mm	standard	pacs
5	axial mip lung	10mmx2mm	standard	pacs

Scan Start/end location	lung apex
	lung base
DFOV	35cm/decrease for lung recons
IV contrast volume/type	na
Scan delay	na

Approximate Values for CTDIvol

Patient size	weight(kg)	weight(lbs)	CTDIvol(mGy)
SMALL	50-70	110-155	0.25-2.8
AVERAGE	70-90	155-200	0.5-4.3
LARGE	90-120	200-265	1.0-5.6

*The ACR Reference Dose for a "standard size patient" (by definition, is approximately 5' 7" and 155 lbs or 170 cm and 70 kg with a BMI of about 24) is a CTDIvol of less than 3 mGy.

*There is no AAPM recommended NEMA XR29 Dose Notification Value for lung screening scans. In general, lung screening exams should not have a CTDIvol greater than 7 mGy. Exams with CTDIvol values less than the minimum allowed range should not be performed unless approved by a radiologist.

Revision Date 04-20-2018
Approved by Dr Ellermeier Dr Mollard

.