

Non Small Cell Lung Cancer Radiotherapy Clinical Decision Tree Malthus : Updated March 2013

Non Small Cell Lung Cancer [NSCL]	Stage 1 16% (ECRIC, LUCADA)	Surgery 80% Malthus consensus	Complete resection	No radiotherapy ²⁷ ECRIC 93%
			Positive margins	Radiotherapy ECRIC 7% 60 Gy 30# 55 Gy20# 66Gy 33#
		No surgery Medically inoperable 20%	Radiotherapy 60-66 Gy /30-33# ,55 Gy/20# CHART ^{14,15,21} 54 Gy/36#/12d, T1-2 ≤5 cms SBRT ^{1,11} [Stereotactic Body Radio-Therapy] 54Gy/3# over 2 weeks > 40 hours apart, < 8 days apart ECRIC RT 57%/ ECRIC 43% no treatment	
Stage 2 7% LUCADA, 8% ECRIC	Surgery 80%	Complete Resection	No radiotherapy ²⁷ ECRIC 79%	
			Positive margins ²	Radiotherapy 60* Gy/30-33# ECRIC 21% 55 Gy/20#
No surgery Medically inoperable 20%	Radiotherapy 60-66* Gy /30-33# ,55 Gy/20# CHART ^{14,15,21} 54 Gy/36#/12d, ECRIC 55% RT, 45% no Tx T1-2 ≤5 cms SBRT ^{1,11} [Stereotactic Body Radio-Therapy] 54Gy/3# over 2 weeks > 40 hours apart, < 8 days apart If stage 2 concurrent CT/RT ^{13,26}			
Stage 3a 10% LUCADA Normalised	Surgery 10% [non bulky nodal disease]	N0-1	No Radiotherapy ECRIC 71%	
		Positive margin, ≥N2 ^{2,27}	Radiotherapy ECRIC 29% 55/20#, 60* Gy/30# if +ve margin 50/20 ≥ N2 disease Lung ART 54/30#	
Stage 3a 10% LUCADA Normalised	No surgery 90%	Definitive RT 40% Concurrent chemo-radiotherapy ^{13,26} 60-66* Gy in 30-33#, 55 Gy/20# If unable to have chemotherapy consider CHART ^{14,15,21} 54 Gy/36#/12 otherwise 66/33# or 55/20# Superior sulcus tumour consider preop crt 45 Gy/25# then surgery.		
		Palliative RT 60% high dose palliative 36 Gy /12#, 30 Gy/10# ²⁴ Poor performance status focal symptoms – palliative 20 Gy/5#, 16Gy/2, 10Gy/1 #Thoracic radiotherapy		
Stage 3b 19% LUCADA Normalised	Good performance status 50%	20% Radiotherapy – Concurrent CT/RT ^{13,26} 66G*y in 30#, 55Gy/20# over 4/52 ECRIC no treatment or surgery 37% 10%If unable to have chemotherapy consider CHART ^{14,15,21} 54Gy/36#/12d or 55/20# or 66/33#. 20 %-May consider chemo first and then sequential radical radiotherapy if reduced bulk. If excellent performance status and very large tumour [curative dose not possible as not encompassable] – 50% of patients are palliative High dose palliative 39/13#, 36 Gy/12#*, 30 Gy/10# ²⁴ Palliative RT to chest if symptoms – 20 Gy/5#, 17* ¹⁶ Gy/2#16* ¹⁶ Gy/2#, 10Gy/1#		
		Poor Performance Status 50%	25% Palliative chemo 75% Palliative RT 20Gy 5#, 16-17Gy 2#, 10Gy single#	
Stage 4 48% Lucada, 40% ECRIC	Focal symptoms 50%	Give chemotherapy /biological treatment. Palliative Radiotherapy to chest ECRIC RT 50% 39/13#*, 36 Gy/12# ¹⁶ [very good performance status] 30 Gy/10# ²⁴ ,20Gy/5#, 16-27Gy/2 ¹⁶ , 10Gy/1# Bone metastases 20 Gy/5#, 8Gy/1*# QUARTZ trial 20 Gy/5# vs no RT Brain 20 Gy/5# - If metastasis resected consider 30 Gy/10#		
		No focal symptoms 50%	No radiotherapy ECRIC RT 50%	

Figures in red are clinical estimates

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Guidelines

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