

MALTHUS HEAD and Neck Decision Tree : Updated March 2013

Oropharynx /Unknown primary ECRIC 28% Stage I-II MALTHUS 10%	Fit for curative treatment 99% MALTHUS	Primary Radiotherapy 85-95% MALTHUS	Conventional Fractionation* 10% NNUH est	66 Gy/33 f T1 20% NNUH est			
			Altered fractionation	Accelerated fractionation	Normal//hyperfractionated	70 Gy/35 f T2 80% NNUH est	
					Hypofractionated RT	RTOG 72Gy 42f CB Danish 6f per week 55 Gy 20 f , 65 Gy 30 f	
		Primary Surgery incl. pt choice 5-15% MALTHUS	PORT 30% est MALTHUS	Conventional fractionation* 60 Gy /30f', 66 Gy /33f Hypofractionation 50 Gy 20f, 55 Gy 20f			
	No PORT 70% est MALTHUS						
Not fit for curative therapy 1% MALTHUS	PRT 25% est NNUH	8 Gy/1f , 20 Gy/5f , 27 Gy/6f est 30 Gy /10f					
	No Rt	75% est NNUH					
Stage III-IV MALTHUS 90%	Stage III-IVB MALTHUS 95%	Fit for curative therapy 90-95% est MALTHUS	Disease suitable for curative therapy 95% est MALTHUS	Primary RT +/- CT Very MDT dependant 70-80% est MALTHUS	Conventional fractionation*	68 Gy 34f 70 Gy 35f	
					Altered fractionation	Accelerated Normal/hyperfractionation DAHANCA 68Gy 34f Hypofractionation 65Gy/30 f, 55 Gy 20 f [
				Not accelerated Hyperfractionated 81.6/68f			
				Primary Surgery including debulking nodes 25% MALTHUS	PORT Should be 100% MALTHUS est 90%	Conventional fractionation* 60 Gy 30 f 66 Gy 33f microscopic 70 Gy 35 f macroscopic residual Hypofractionation 50 Gy 20f, 55 Gy 20f	
		No PORT 10 % est MALTHUS					
Disease unsuitable for curative therapy < 5%	Palliative RT No RT	60% est MALTHUS NNUH est 80%					
		40% est MALTHUS NNUH est 20%					

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		Unfit for curative therapy 5-10 % MALTHUS	Palliative Radiotherapy 60%	8 Gy/1# , 20 Gy/5# , 27 Gy/6# , 30 Gy /10#
			No Radiotherapy 40%	
	Stage IVC MALTHUS 2 %	Symptomatic 70%	Fit for palliative Radiotherapy 90%, 8 Gy/1# , 20 Gy/5# , 27-36 Gy/6# , 30 Gy /10#	
			Unfit for palliative radiotherapy 10%	
		Asymptomatic 30%		

Oral cavity and lip 28% DAHNO Stage I-IVB 98%	Suitable for curative surgery and RT MALTHUS 90%	Surgery preference [Clinician or patient preference] 50% est MALTHUS [except T4 invading bone]	PORT 40% MALTHUS estimate	Conventional fractionation*66-70 Gy in 33-35 # If adverse factors-micro to macro residual disease, Hypofractionation 50 Gy 20f, 55 Gy 20f
			No PORT 60% MALTHUS estimate	
			Fit for and chose radiotherapy 50% est MALTHUS	Conventional fractionation*66-70 Gy in 33-35 # If adverse factors-micro to macro residual disease, Normo/hyperfractionated DAHANCA 68/34 f, 81.2 Gy/68 f Hypofractionation 50 Gy 20f, 55 Gy 20f, 90% MALTHUS
			Palliative RT 10% MALTHUS	
	Unsuitable for curative surgery MALTHUS 5 %	Fit for radiotherapy 95% MALTHUS	Curative RT Conventional fractionation*66-70 Gy in 33-35 #, If adverse factors-micro to macro residual disease, Normo/hyperfractionated DAHANCA 68/34 f, 81.2 Gy/68 f Hypofractionation 50 Gy 20f, 55 Gy 20f, 85% NNUH Palliative RT 15% NNUH	
Unsuitable RT or Surgery 5%				
IVC 2%	Symptomatic 70% NNUH est	Fit for palliative Rt 90% NNUH est		
	Asymptomatic 30% NNUH est	Unfit for palliative Rt 10% NNUH est		

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Nasopharyngeal Cancer 2% DAHNO and ECRIC	Stage I-IVB 98% MALTHUS	Fit for radiotherapy 99% MALTHUS	Suitable for curative Radiotherapy 95% MALTHUS	Conventional Fractionation*	66 Gy in 33 f 70 Gy in 35 f	
			Unsuitable for curative Radiotherapy 5% MALTHUS	Palliative Radiotherapy 95% [PRT] MALTHUS	8 Gy 1 f, 20 Gy 5 f, 27- 36 Gy 6 f, 30 Gy 10 f	
		No Radiotherapy 5% MALTHUS				
		Not fit for radiotherapy 1% MALTHUS				
	Stage IVC 2 % MALTHUS	Symptomatic 100% MALTHUS	Fit for palliative radiotherapy 90% MALTHUS	Local PRT 60% MALTHUS	8 Gy 1 f, 20 Gy 5 f, 27- 36 Gy 6 f, 30 Gy 10 f	
				Distant PRT MALTHUS	8 Gy 1 f, 20 Gy 5 f	
		Not fit for palliative RT 10% MALTHUS				
		Asymptomatic 0% MALTHUS				

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Nasal cavity & Paranasal sinuses Stage I-II MALTHUS est 20%	Fit for surgery 95% NNUH est	PORT ¹³ 60 Gy/30 f, 66 Gy/33 f 80% NNUH est		
	Not fit for surgery 5% NNUH est	No RT NNUH est 20%		
		Fit for RT ¹⁴ 80% NNUH est	Conventional fractionation * 70 Gy/35 f Hypofractionation 55 Gy/20 f [70% est NNUH]	
			Palliative Radiotherapy PRT [30% est NNUH] 8 Gy 1 f, 20 Gy 5 f, 27-36 Gy 6 f, 30 Gy 10 f	
Not fit for RT 20% NNUH est				
Stage III-IVB 78 % est MALTHUS T3-T4a 80% NNUH est	Fit for surgery and PORT NNUH est 95%	Conventional fractionation* 60 Gy/30f, 66 Gy/33 f, 70 Gy/35 f Hypofractionation 55 Gy/20 f		
	Not fit for surgery * NNUH est 5 %	Fit for RT NNUH est 80%	Conventional fractionation* 70 Gy/35 f Hypofractionation 55 Gy/20 f , 70 % est NNUH	
			30 % PRT est NNUH	
		Not fit for RT NNUH est 20%		
T4b 20% NNUH est	Suitable for curative surgery NNUH est 20%	Fit for surgery and PORT NNUH est 95%	Conventional fractionation* 60 Gy/30f, 66 Gy/33 f,70 Gy/35 f Hypofractionation 55 Gy/20 f	
			Unfit for surgery and PORT NNUH est 5%	Fit for Radiotherapy NNUH est 80%
		Unfit for Radiotherapy NNUH est 20%		
	Unsuitable for curative surgery NNUH est 80%	Fit for Radiotherapy NNUH est 90%	Curative intent NNUH est 30%	Conventional fractionation* 70 Gy/35 f Hypofractionation 55 Gy/20 f
			Palliative radiotherapy [70% est NNUH]	
		Not fit for Radiotherapy NNUH est 10%		
IVC 2% est NNUH	Symptomatic 50% est NNUH	Fit for palliative RT 90% NNUH est	Local 60% NNUH est	
			Distant 40% NNUH est	
	Not fit for radiotherapy 10% NNUH est			
Asymptomatic 50% est NNUH				

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Glottic Larynx 19% DAHNO 6	70% larynx Stage I-II or Tis MALTHUS		Fit for curative therapy 95% MALTHUS	70-90% Primary RT MALTHUS	Conventional ³ Fractionation* 66 Gy/33 f T1 70/35 Gy/35 f T2			
					16-20# Hypofractionation ⁹			
				10-30% Primary surgery MALTHUS	10-15% MALTHUS PORT ⁶ 60 Gy/30 f, 66 Gy/33 f 70/35 Gy/35 f			
					No PORT 90% MALTHUS			
			Not fit for curative therapy 5% MALTHUS	Fit for PRT 20 % NNUH	RT 8 Gy 1 f, 20 Gy 5 f, 27-36 Gy 6 f, 30 Gy 10 f			
				Not fit for PRT 80% NNUH	No RT			
	30% Stage III-IV	95% Stage III- IVB	Disease suitable for laryngeal preservation ~	Curative RT ³⁻⁶ 90% MALTHUS	Conventional fractionation 70 Gy/35 f*			
					Altered fractionation	Accelerated	Normo / hyperfractionated ⁴ DAHANCA 68 Gy/34 f	
							Hypofractionated 65 Gy/30 f, 55Gy/20 f	
					Non accelerated	Hyperfractionated 81.2 Gy/68 f		
		10% MALTHUS	PRT ⁸ See above					

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				Not fit for curative RT	No RT		
			Disease not suitable for laryngeal preservation ~50% MALTHUS	90% MALTHUS Suitable for surgery	Fit for surgery	80% PORT ⁷ 20% No PORT	As above
					Not fit for surgery	RT ³⁻⁶	"Curative" RT Conventional fractionation 70 Gy/35 f* PRT as above
				No RT			
				10% MALTHUS Not suitable for surgery		RT probably	Curative RT ³⁻⁶ Conventional fractionation 70 Gy/35 f* PRT ⁸
					No RT		
	1% Stage IVC NNUH est	Symptomatic 80% NNUH est	Fit for RT 90% NNUH est	PRT	Local PRT ⁸ 60% NNUH est 8 Gy 1 f, 20 Gy 5 f, 27-36 Gy 6 f, 30 Gy 10 f		
					Distant PRT ⁸ 40% NNUH Est 8 Gy 1 f, 20 Gy 5 f		
			Not fit for RT 10% NNUH est	No RT			
		Asymptomatic 20% NNUH est	No RT				

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Metastatic neck nodes skin primary 5%	Suitable and fit for surgery 95% est MALTHUS	PORT est 90% MALTHUS	Conventional fractionation ¹³ 70 Gy/35 * Hypofractionated 55Gy/20 f, 50 Gy/20 f ¹⁵
		No RT est 10% MALTHUS	
	Not fit for surgery 5% est MALTHUS	Palliative radiotherapy est 90% NNUH	
		No RT. est 10% est 10% NNUH	

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Hypopharynx and supra glottic Stage I-II 10% NNUH est	Fit for curative therapy 99% MALTHUS	Primary RT 80% NNUH est	Conventional fractionation 66 Gy /33 f, 70 Gy/ 35f Altered fractionation normo /hyperfr. 72Gy/42 f, Hypofr. 55 Gy/20 f, 65 Gy/30f		
		Primary surgery 20% NNUH est	PORT Conventional fractionation 60 Gy/30 f, 66Gy/33 f, 70 Gy/35f Hypofr. 55 Gy/20 f, 65 Gy/30f 30% MALTHUS No RT 70% MALTHUS		
	Unfit for curative therapy 1% MALTHUS	Palliative RT	25% NNUH est		
		No RT	75% NNUH est		
Stage III-IVB 85 % est NNUH	Fit for curative therapy 80% NNUH est	Disease suitable for curative therapy 80% NNUH	Primary RT +/- chemotherapy 30% NNUH est	Conventional fractionation 66Gy/33 f,70 Gy/35f Altered fractionation normo/hyperfr. 72Gy/42 f, Hypofr. 55 Gy/20 f, 65 Gy/30f	
			Primary surgery 70% NNUH est	PORT Conventional fractionation 60 Gy/30 f, 66Gy/33 f, 70 Gy/35f Hypofr. 55 Gy/20 f, 65 Gy/30f 90% NNUH est No PORT 10% NNUH est	
		Disease not suitable for curative therapy 20% NNUH	Palliative radiotherapy 30% NNUH est		
	IVC 5% est NNUH	Symptomatic 50% est NNUH	Fit for palliative RT 90% est NNUH	Local PRT 60% est NNUH	
Unfit for palliative RT 10% est NNUH			Distant 40% est NNUH		
	Asymptomatic 50% est NNUH				

Salivary Gland Tumours 6%	Fit for surgery 95% NNUH est	PORT 80% NNUH est	Conventional fractionation 70 Gy/35 f, 66 Gy/33 f, 60 Gy/30 f Hypofractionation 55 Gy/20 f, 50 Gy/20 f
		No PORT 20% NNUH est	
	Unfit for surgery 5% NNUH est	Palliative Radiotherapy 80% NNUH est	
		No RT 20% NNUH est	

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Guidelines

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