

BREAST CANCER

DCIS Ductal Carcinoma-In- Situ ECRIC 12%	Mastectomy 31% ECRIC		No Radiotherapy
	Breast Conserving Surgery [BCS] 69% ECRIC		Radiotherapy ² 90% 40 Gy/15# [in trial], 50* Gy/25# [TROG trial of conventional vs hypofractionated RT +/-boost]
Breast Cancer Stage 1 T1 N0-N1 M0, T0 N1 M0 ECRIC 37%	Mastectomy 23% ECRIC	High risk positive posterior margin or <1mm[? evidence] 8% ECRIC	Radiotherapy ^{1,2,3,4,6,7,10,11} 40* Gy/15#, 42.5 Gy/16#, 50 Gy in 25# All the oncologists offer 40/15 [11/13], 42.5/16[1], 45/20[1]. 90% of patients would be offered 40/15. for several clinicians 50/25 for left sided tumours, concerned about cardiac events. 75% of patients offered chest wall RT only
		Intermediate Risk N1-3 nodes after axillary clearance LVI +ve 4% ECRIC Gd 3	Consider entering SUPREMO ²⁴ trial may be randomised to no RT or RT 40 Gy/15# or 50 Gy/25# Or no radiotherapy
		Low Risk No nodes ECRIC 88%	No Radiotherapy. Discuss with patient re preference for RT
	BCS 77% ECRIC	High Risk Young age 30%	Radiotherapy breast ^{2,3,4,6,7,9,10,15,17,22} 40* Gy/15#, 42.5 Gy/16#, 50 Gy/25# + boost 16* Gy/8# ¹⁹ , 10 Gy in 5#, 13.35 Gy/5#, 12 Gy/4# [no evidence for 12/4 but commonly used here] [Fast trial 5# in 5/52]-New trial fast forward starting in 5# in 1/52] IMPORT High trial ²³
		Low Risk 70%	Radiotherapy breast 40* Gy/15#, 42.5 Gy/16#, 50 Gy/25# Awaiting fast trial new options 30 Gy/5#over 35/7 or 28.5 Gy/ 5# over 35/7 ¹⁵ IMPORT High ²³
	Stage 2 T0-1 N1 M0, T2 N0-1 M0, T3 N0 M0 ECRIC 39%	Mastectomy 47% ECRIC	High risk ≥4 nodes +ve positive posterior margin or <1mm T≥5 cm ECRIC 35%
Intermediate risk 16% N1-3 nodes T=3-5 cm LVI +ve Gd 3			Consider entering SUPREMO ²⁴ trial may be randomised to no RT or RT 40 Gy/15# or 50 Gy/25# No RT
Low risk – pN0 ECRIC 49%			No radiotherapy except for recurrence.
BCS 53% ECRIC		Breast and boost 80%	Radiotherapy 40* Gy/15#, 42.5 Gy/16#, 50 Gy/25#+ boost 16* Gy/8 #, 12 Gy/4#, 10 Gy/5# IMPORT High ²³
		Breast 20%	RT 40* Gy/15#, 42.5 Gy/16#, 50 Gy/25# IMPORT High trial ²³
Stage 3 ECRIC 8% 3A- T0-2 N2 M0, T3 N1-2 M0 3B- T4 N0-N2 M0 3C any TN3M0	Good performance status 65% If doubtfully operable then consider neoadjuvant Ct +/- preoperative radiotherapy	Mastectomy 59% ECRIC	Radiotherapy RT 40* Gy/15#, 42.5 Gy/16#, 50 Gy/25#
		BCS 41% ECRIC	RT 40* Gy/15#, 42.5 Gy/16#, 50 Gy/25# + boost 16* Gy/8#, 12 Gy/4#, 10 Gy/5# IMPORT High trial ²³
	Poor performance status 35%	Consider palliative radiotherapy to breast if T4, symptomatic 65%	Radiotherapy
		No symptoms 35%	No radiotherapy
Stage 4 Any T, any N, M1 ECRIC 4%		Metastases symptoms 40% Local breast symptoms 30%	Radiotherapy Bone 8 Gy/1# 75% of patients treated with single # or 20 Gy/5# 25% if retreatment, fracture/impending fracture , visceral 20 Gy/5# , cerebral metastases Good performance status 30 Gy/10#, 20 Gy/5#, 1-3 mets consider stereotactic RT +/- WBICord compression 20 Gy/5# Palliative radiotherapy to breast 30 Gy in 10#, 36 Gy in 6# over 5-6/52. For good

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			performance status patients consider 40/15
		Metastases no symptoms 30%	No radiotherapy

Fractionation schedules may be affected by Simultaneous integrated boost if patient having IMRT then no extra fractions given however radiotherapy planning more complex. CTRAD, NPI ARTEMUS trial

Internal mammary nodes: <2% of Evidence is insufficient. Decision to treat internal mammary nodes is clinicians based decision- nodes involved then treat. MA20-in BCS high risk women WBI and regional nodal irradiation shows improvement in isolated locoregional disease free survival and distant DFS

Clinical estimates are in Red

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